

# Public Utilities

*BORTNIGL*

Volume 57 No. 7



March 29, 1956

## "PARTNERSHIP" IN WATER RESOURCES DEVELOPMENT

By Ralph A. Tudor

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## Realistic Regulation in an Expanding Economy

By P. M. Schuchart

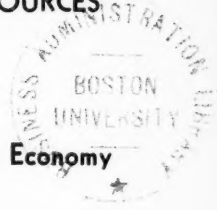
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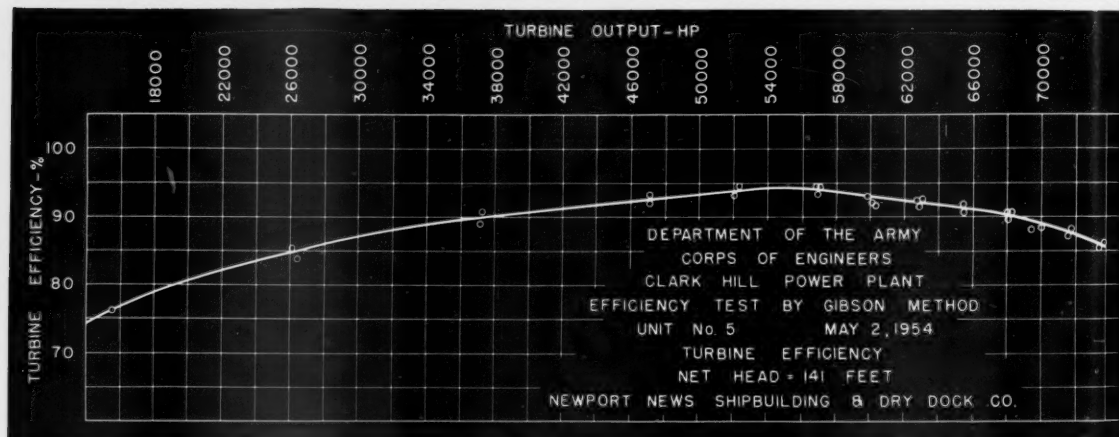
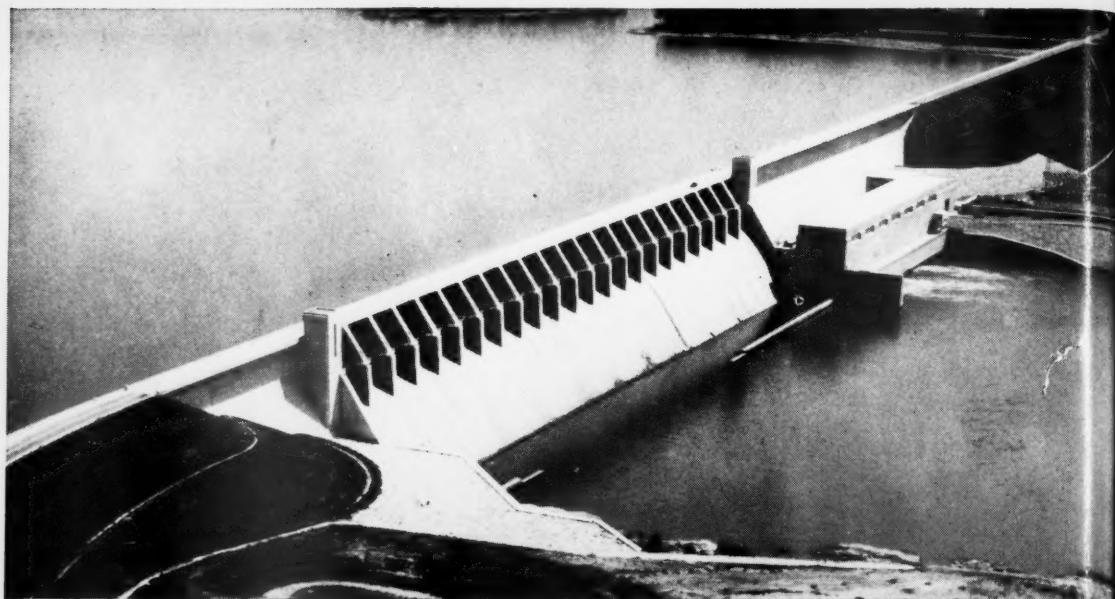
## College-Business Exchange Program

By W. M. Curtiss

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# Public Utilities

## FORTNIGHTLY

VOLUME 57

MARCH 29, 1956

NUMBER 7



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 A worth-while program is being conducted to bring teachers and workers together.

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# the Miracle on

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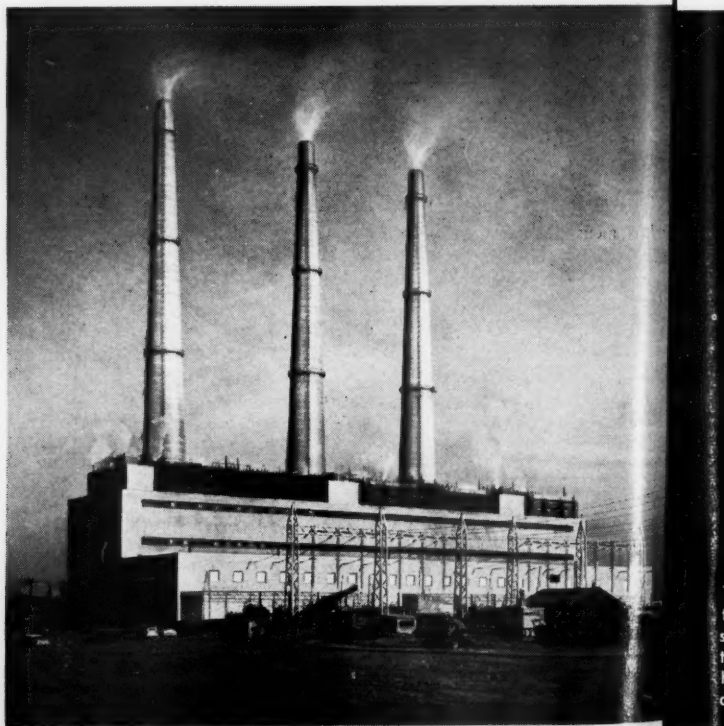
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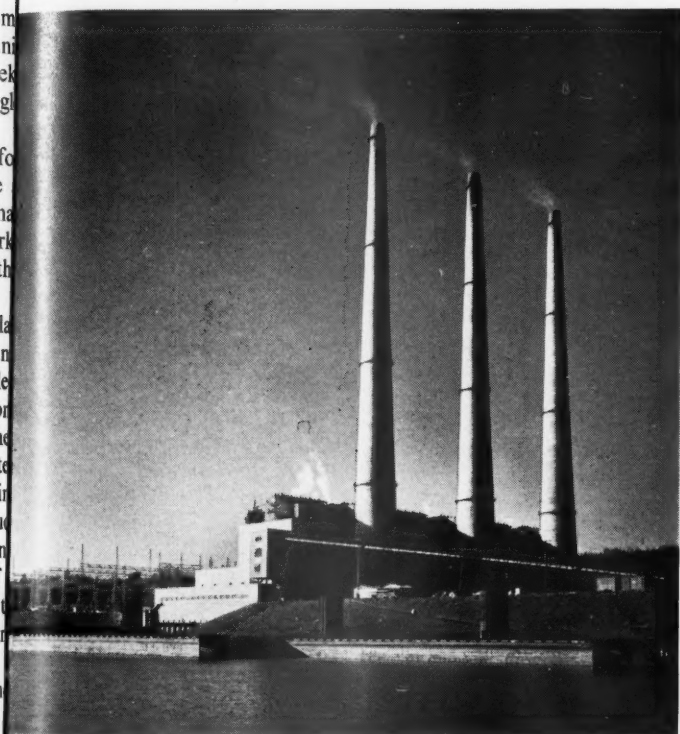
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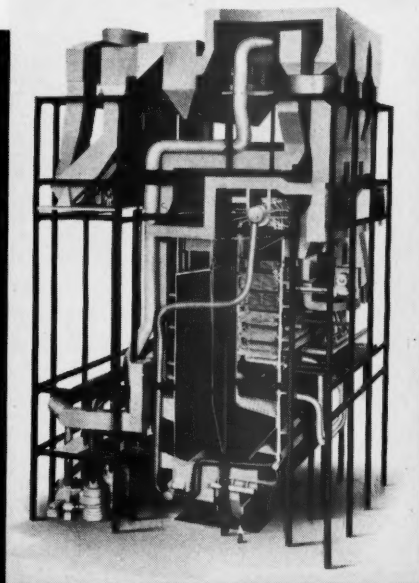


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# Pages with the Editors

**E**ARLIER this month, in the neighboring city of Baltimore, there was witnessed the end of an unpleasant situation which is happening too often in the annals of public service in the United States, especially in the field of urban transit. On March 5th, Governor McKeldin, acting under a law hastily passed by the Maryland legislature, seized properties of the Baltimore Transit Company in order to end a work stoppage of more than a month growing out of a labor dispute. Somewhat similar developments have occurred in Washington, D. C., and several other cities where the rising inflationary tide of wage demands and other expenses, including taxes, have caught private company managements under a grindstone of diminishing or nonexistent returns.

INEVITABLY, the tendency seems to be to turn to the government (state or local, as the case may be) for a solution in default of decisive collective bargaining. It is not as if municipal or other government authorities have encouraged this trend towards government ownership by default. They have not. Mayor D'Alesandro of Baltimore inveighed against municipal ownership. So did the commissioners of the District of Columbia. So did municipal authorities in St. Louis and other cities bedeviled by transit strikes. But whether

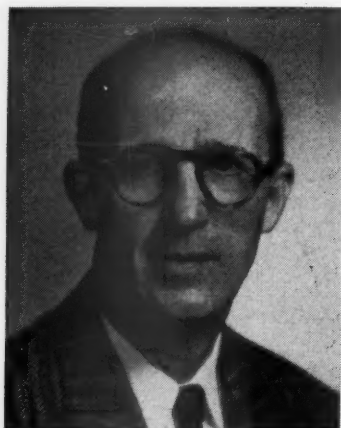


RALPH A. TUDOR

the city fathers like it or not, the specter of public operation, if not public ownership by default, inevitably appears.

**B**UT if this is to become a pattern in settling transit disputes, is it not likely to spread to other forms of labor disputes, to the lasting injury of private enterprise in the public utility field? It is a serious matter which would seem to suggest some independent long-range thinking at a higher level than the particular disputes which cause these local transit work stoppages. Granted that the government has a responsibility to protect the public from the hardships of utility strikes which might otherwise go on and on, is there no way that normal bargaining relationships can be continued, while the operations go on under the form of private enterprise instead of government seizure and operation which nobody seems to want?

IN Baltimore, the seizure law is based on an as yet untested formula for arbitration. In Washington, D. C., Congress actually voted the private company's charter out of existence as of next August. Meanwhile, the local authorities and Congress are now scrambling to put together some kind of a public authority to take over the operations.



P. M. SCHUCHART



...even  
in tangled  
disaster debris

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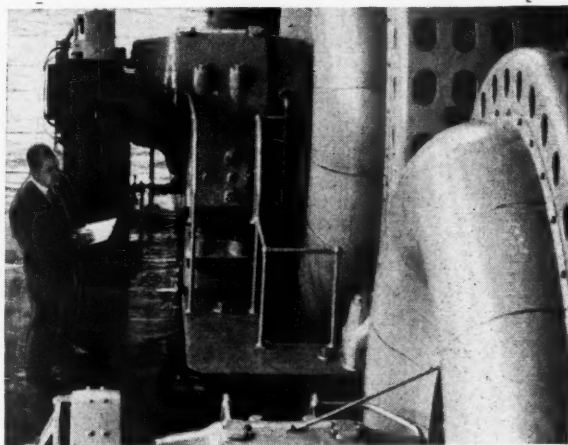
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## PAGES WITH THE EDITORS (Continued)

**A**SSUMING that urban transit is a necessary, indispensable service in most of our large cities, this spreading plague of work stoppage and government operation by default is becoming a headache of national size. It would seem to be of sufficient importance to command the attention of a disinterested, highly respected body of the caliber of the Hoover Commission on government reorganization. After all, the elements to be considered—tax remittance, the social and economic obligations of the automobile-riding segment of the population to the transit-riding segment, the basic question of spreading public ownership in an industry heretofore largely dominated by private enterprise—all these are serious and fundamental questions sufficient to challenge the best brains that can be put to work on them.

\* \* \* \*

**T**HE leading article in this issue is an analysis of the history of partnership projects, going back as far as 1897. Its author is RALPH A. TUDOR, president of the Tudor Engineering Company of San Francisco, California, and until very recently the Under Secretary of Interior. Mr. TUDOR started his career in the United States Army Corps of Engineers after graduating from West Point in 1923. He has had wide engineering experience, including design and management of the San Francisco-Oakland Bay bridge. During World War II he returned to the Army and became District Engineer at Portland, Oregon, with the rank of Colonel. His article in this issue is a restatement

of a discussion of the administration's partnership program which he made to the recent National Conference on Water Resources Policy at St. Louis.

\* \* \* \*

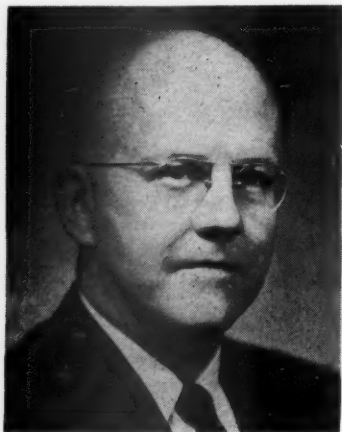
**B**EGINNING on page 441, P. M. SCHUCHART, director of the public utilities department of the Florida Railroad and Public Utilities Commission, describes Florida's regulatory climate. A graduate ('26) of Washington and Lee University, Mr. SCHUCHART entered the utility field with the Bell Telephone Company of Pennsylvania. He was associated with that company until World War II when he became a civilian telephone engineer for the U. S. Signal Corps, earning a Certificate of Commendation. After some post-war managerial service with independent telephone companies in Virginia and Florida, he was appointed in 1952 to head the newly formed staff of the reorganized Florida commission.

\* \* \* \*

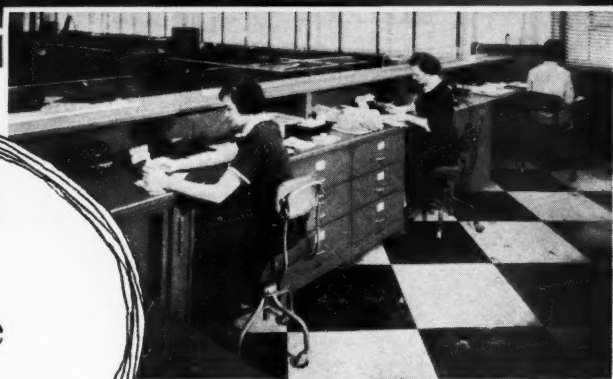
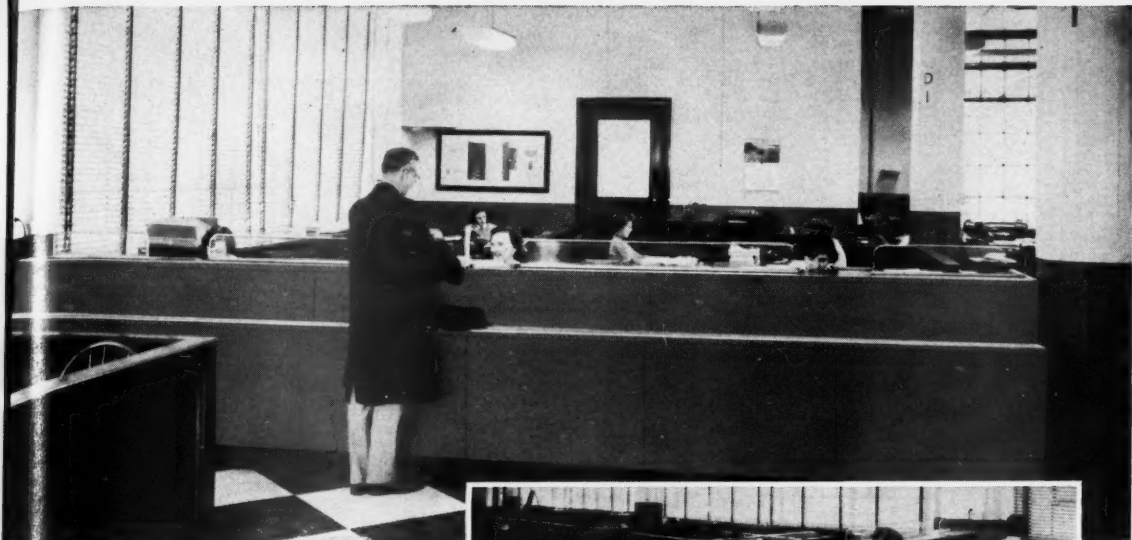
**D**R. W. M. CURTISS, whose article on the "College - Business Exchange Program" begins on page 449, was reared on a dairy farm in northern Illinois. After graduation from the Illinois College of Agriculture, he took postgraduate work at Cornell University where he received his PhD in 1936. He has since held positions in teaching, extension, and research at Cornell, becoming professor of marketing. In 1946 Dr. CURTISS spent a year with the University of Nanking in Hong Kong, China, where he worked with Dr. J. Lossing Buck on a study and textbook dealing with Chinese farm management. Since that time, Dr. CURTISS has been with the Foundation for Economic Education at Irvington-on-Hudson, New York. He was the foundation's first executive secretary and for the past eight years has been director of its college-business exchange program. He now lives in Chappaqua, New York.

THE next number of this magazine will be out April 12th.

*The Editors*



W. M. CURTISS



*Working side of a 3-section counter*

## How Cashiering AND Bookkeeping are combined in this 3-Clerk Counter...

*...for working efficiency,  
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# Coming IN THE NEXT ISSUE

(April 12, 1956, issue)



## IS FPC GAS PRODUCER REGULATION HERE TO STAY?

It is generally agreed that no further attempt will be made in the present session of Congress to amend the Natural Gas Act so as to relieve the problem created by the jurisdictional responsibilities imposed on the Federal Power Commission by the U. S. Supreme Court with respect to gas producers. Furthermore, in view of developments which led up to and have since followed the unexpected veto of such legislation by President Eisenhower, there is even some doubt whether similar legislation can be revived in the next session of Congress. Is there hope for **any** legislation? If so, what form must it take to secure enactment? And, in the final analysis, isn't some measure of FPC jurisdiction over gas producers likely to remain permanent? These are all questions which Francis X. Welch, editor of this publication, has been checking on and will analyze in an article pointing to the main question which is uppermost in the minds of gas producers: Is FPC gas producer regulation here to stay?

## INCOME BONDS REVISITED

These are times when many public utility company managements are caught in the pressure of new financing requirements and regulatory consequences in the form of allowable rates. Should new financing take the form of bonds or stock? And what about that controversial security known as "income bonds," or the more euphemistic appellation "revenue bonds"? There have been some refinements on the old-style income bonds which had an unpleasant connotation in many quarters, growing out of unhappy experiences during the depression. Is the present financial climate one in which the income bond—as modernized—has financing advantages outweighing inherent limitations? With a number of state commissions hypothetically increasing debt ratio, in order to justify lower over-all return to limit rate increases, there is much to be said for a fresh consideration of income bond possibilities. Philip P. Ardery, Louisville attorney, and Carl E. Abner, professor of the school of business administration of the University of Louisville, have written an entertaining and thoughtful account of this old problem of utility financing brought up to date.

## THE RIGHT-OF-WAY MAN—A FRIEND MAKER

The practice of utility company right-of-way purchasing has come a long way from the poker game type of negotiation which characterized such proceedings a little more than a decade ago. The modern utility right-of-way expert does not deal with property owners on the basis of hostile trading, nor even as a bargaining adversary. He knows that the property owner of today will be the utility customer of tomorrow and it is the expert's job to make him, if possible, the friend of the utility company for the indefinite future. Hence the effort to create a broad professional point of view on the part of the right-of-way expert—one which actually seeks to protect the interest of the property owner and the public, as well as to secure the necessary rights for the conduct of the necessary public service. Frank E. Randall, right-of-way superintendent of the Pacific Telephone & Telegraph Company of Los Angeles, California, on the basis of an interview by James H. Collins, professional author, tells us something of the philosophy and reasoning back of this modern utility company attitude.



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# Remarkable Remarks

*"There never was in the world two opinions alike."*

—MONTAIGNE

EDITORIAL STATEMENT  
*The Wall Street Journal.*

"As for ourselves, we are ready to speculate confidently in the economic future of the country. But we shudder at what will happen if everyone gets the idea that not even for a moment is anything going to go wrong again."

DOUGLAS MCKAY  
*Secretary of the Interior.*

"Where people are able to do things for themselves, they should not lean on the federal government or the state. I think the local people should step out and do the things themselves, and whether it's public or private [power development] is none of my affair."

HARRY A. BULLIS  
*Chairman of the board,  
General Mills, Inc.*

"It has been said that the future belongs to them that prepare for it. Just so, as business faces up to its social responsibilities, will society stand up for business. In this combination rests the destiny of our expanding economy, and an America with increasing opportunity and happiness for all."

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"As a people we Americans know that there is only one kind of security that means anything. That is the security you gain when you know you are growing and advancing—the security you gain by moving out into the open future—by exploring the tremendous range of possibilities in this twentieth century world—and by acting fast on good opportunities when they appear."

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*President of the United States.*

"Commerce—it is free propagation of progress in this country that has brought today the great organism, this great institution that we call modern America. It has done that without the desertion of the basic principles that were applicable a hundred years ago, and 177 years ago, when our foundation document was written. We still believe that in the aggregate the initiative of the individual, his aspirations, his hope of bettering himself and his family, his ambitions, if directed equally toward the common good as toward his own betterment, will produce the greatest good for all of us."

IRVING E. HOWARD  
*Staff member, "Christian  
Economics" magazine.*

"The classical economists taught that there are four ways to get property or wealth. It may be created by the sweat of one's brow or the use of one's talents. It may be traded for, received as a gift, or taken by force. In simpler days, when people were so naive as to believe the Ten Commandments, taking property by force was called 'stealing.' In more recent times, however, we have been led to think that what may be wrong for the individual is right for government. According to this philosophy, if by majority rule, the government takes property by force, the fact that the majority voted for it, makes it not an act of theft, but an expression of 'social consciousness.'"

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The service ranges from a simple private line between two teletypewriters up to net-

works connecting many points. To meet the challenge of today's highly competitive market, you have *direct-fast-accurate-written-private-two-way* record communications.

**Let a Bell System communications engineer make a detailed study of your communications. Such a survey may save you time and money. There's no obligation.**

• *Call your Bell Telephone representative*

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**A**  
Mechanically strong! Sturdy side frames clamp core and coil assembly firmly at top and bottom.

**B**  
Continuous wound coils add mechanical strength — withstand high short-circuit stresses.

**C**  
Extra protection at crossovers.

**D**  
Lead assembly has machine-wound tubes for mechanical support. Leads insulated with oil-impregnated cable paper.

**E**  
Cooling ducts — formed by special snap-lock spacer locked in place between coils.

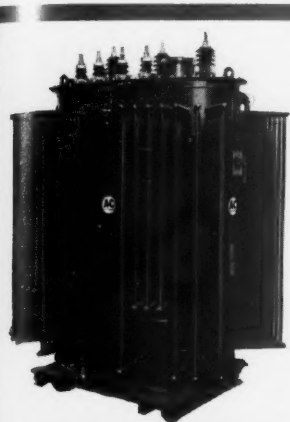
**F**  
Circular coil shape has advantage of preventing distortion under short-circuit conditions.



# ALLIS-CHALMERS

# Balanced Design Works for You

Here's a combination of design features that adds up to balanced design ... long transformer life



No single feature is all-important in transformers! But together they mean *balanced design* — all the things you want and need in a transformer.

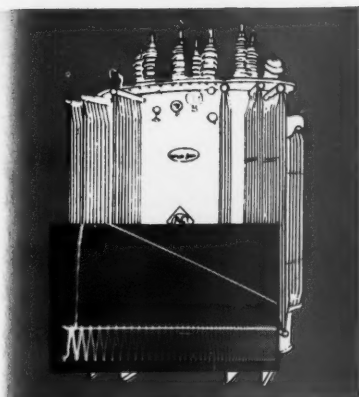
- High impulse strength
- Corona-free construction
- Quiet operation
- Reduced size and weight
- Dependable performance
- High short-circuit strength
- Rugged mechanical construction

In balanced design, every feature must contribute its full share to the operation. No feature can outweigh another — each must complement the other.

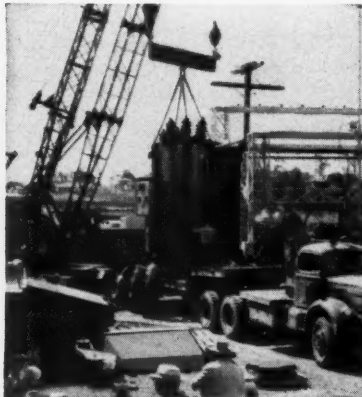
For example — of what value is "light weight" if it cuts performance? With balanced design you get both light weight and efficient performance.

Get complete information. Call your nearby Allis-Chalmers office or write Allis-Chalmers, Power Equipment Division, Milwaukee 1, Wisconsin.

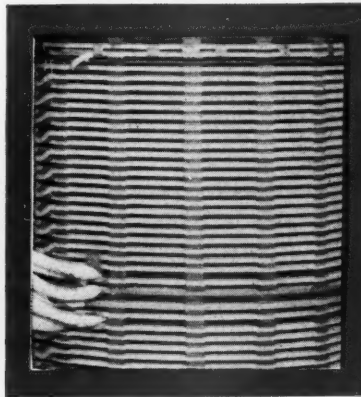
## Three features of balanced design



**1. Corona-free design.** Repeated lightning and switching voltage surges may be applied to the transformer without damage, up to full values as defined by standards.



**2. Reduced size and weight.** This means higher rated transformers are easier to handle — can be moved without removing radiators and bushings.



**3. Proper coil design** plus static shields and interleaved coils where needed provides high series capacitance, as well as more uniform voltage distribution.

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**Illustrations of Capital Cost**

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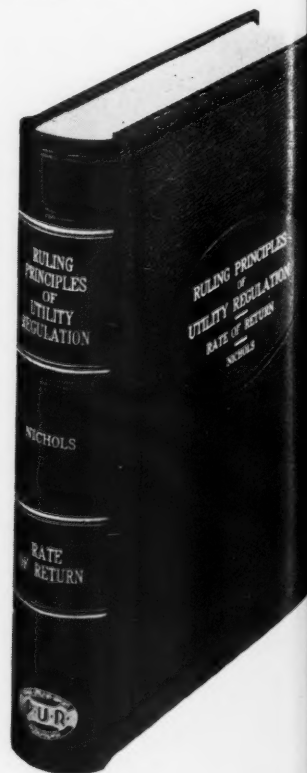
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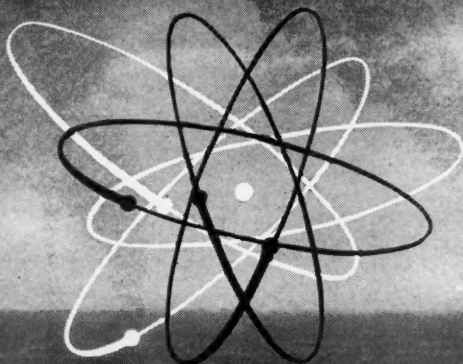
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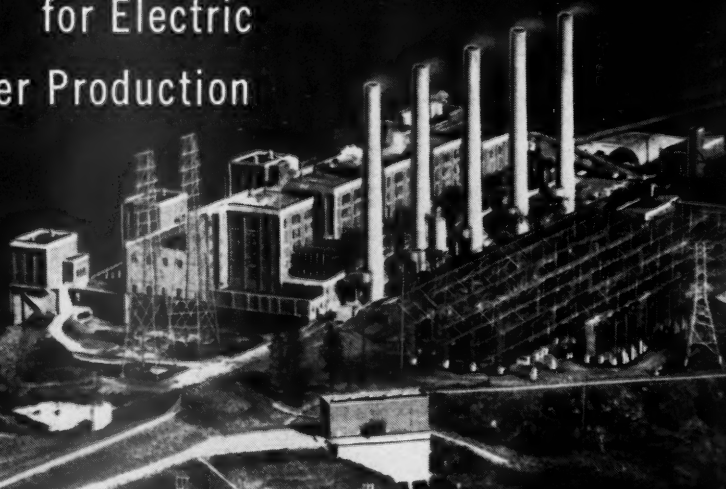
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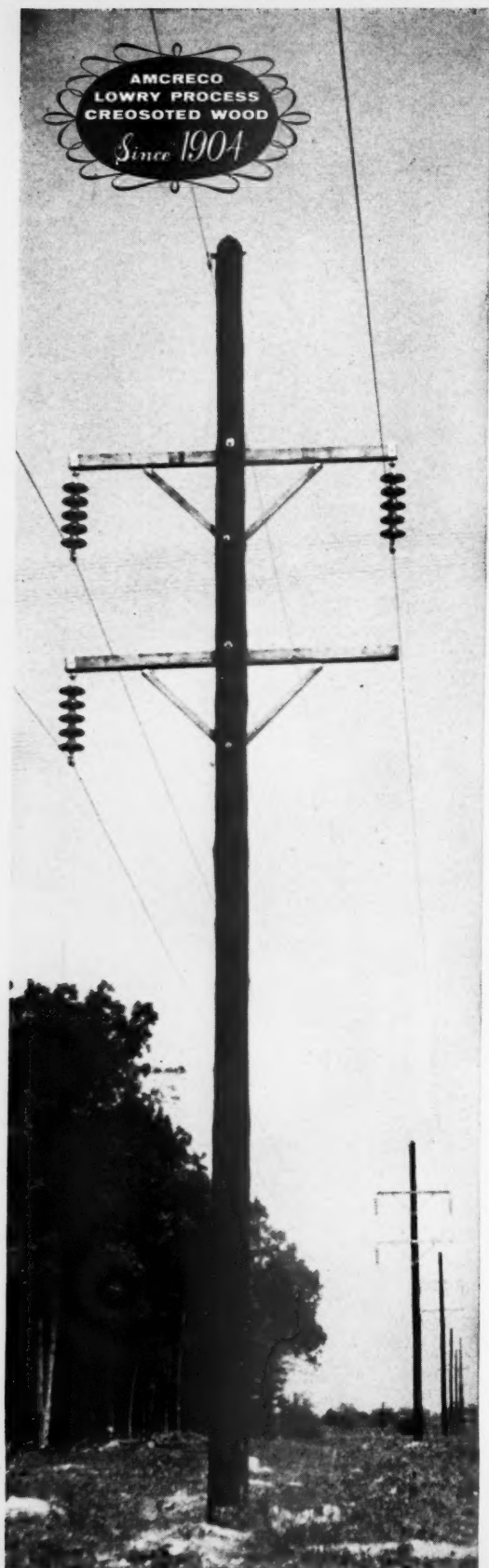
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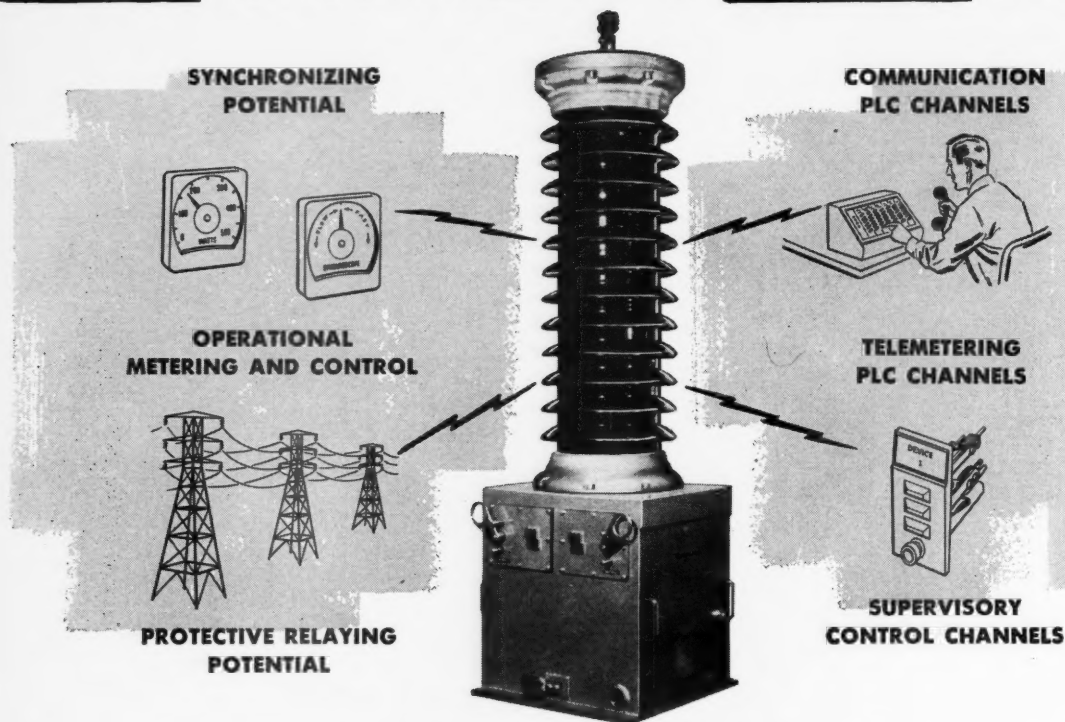


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# UTILITIES

## *A.l.m.a.n.a.c.k*

### MARCH-APRIL

<b>Thursday—29</b> <i>Edison Electric Institute ends 4-day sales conference, Chicago, Ill.</i>	<b>Friday—30</b> <i>Tennessee Valley Public Power Association begins annual meeting, Knoxville, Tenn.</i>	<b>Saturday—31</b> <i>National Conference of Electric and Gas Utility Accountants will be held, New York, N. Y. Apr. 16-18. Advance notice.</i>	<b>APRIL</b> <b>Sunday—1</b> <i>Greater New York Safety Council will hold annual safety convention and exposition, New York, N. Y. Apr. 16-20.</i>
<b>Monday—2</b> <i>American Institute of Electrical Engineers, South West District, begins meeting, Dallas, Tex.</i>	<b>Tuesday—3</b> <i>American Water Works Association, Pennsylvania Section, begins annual meeting, Philadelphia, Pa.</i> 	<b>Wednesday—4</b> <i>Indiana Electric Association begins annual young men's utility conference, Fort Wayne, Ind.</i>	<b>Thursday—5</b> <i>Gas Appliance Manufacturers Association begins annual automatic gas range conference, New York, N. Y.</i>
<b>Friday—6</b> <i>American Water Works Association, Montana Section, begins annual meeting, Livingston, Mont.</i>	<b>Saturday—7</b> <i>Electrical Maintenance Engineers Association ends 3-day national biennial electric industry show, Los Angeles, Cal.</i>	<b>Sunday—8</b> <i>Rotary District Conference of Rotary International begins meeting, Washington, D. C.</i>	<b>Monday—9</b> <i>American Gas Association and Practising Law Institute begin legal symposium, New York, N. Y.</i>
<b>Tuesday—10</b> <i>Iowa Independent Telephone Association begins annual convention, Des Moines, Iowa.</i> 	<b>Wednesday—11</b> <i>Natural Gasoline Association of America begins annual convention, Fort Worth, Tex.</i>	<b>Thursday—12</b> <i>Southeastern Electric Exchange, Engineering and Operation Section, begins meeting, Augusta, Ga.</i>	<b>Friday—13</b> <i>Florida-Georgia Gas Association begins general management conference, Dora, Fla.</i>



*Courtesy, Pacific Gas and Electric Company*

**Portola Substation (San Francisco)**

*An admired example of blending a utility structure with neighboring architecture.*

# Public Utilities

## FORTNIGHTLY

VOL. 57, No. 7



MARCH 29, 1956

## "Partnership" in Water Resources Development

*We hear a good deal these days about the administration's "partnership" program of multipurpose water and power resources development. Yet, it is not generally appreciated that the so-called "partnership" policy, while given new emphasis during the present administration, actually goes back as far as 1897. Here is an interesting analysis of the background of the partnership projects and the present purpose of the policy.*

By RALPH A. TUDOR\*

THE concept of partnership in the development and conservation of the nation's water resources has become a lively subject for discussion and debate during the past two or three years, and will be one of the prominent issues during the coming political campaign.

While the principles involved are to me quite simple, I am aware that a great many

people are honestly very confused in the matter. They hear of the "tragedy of exploitation by big business" and then of "dictation by the bureaucrats and Socialists." They hear of absentee ownership in Wall Street on the one hand, and in Washington on the other. They hear of "local rights" versus the "rights of all the people." I sometimes wonder if the debates of these issues and the resolution of the attendant political philosophies have not be-

\*President, Tudor Engineering Company, San Francisco, California. For additional personal note, see "Pages with the Editors."

## PUBLIC UTILITIES FORTNIGHTLY

come more vital to many parties than the business of getting ahead with the nation's constructive progress and prosperity.

THIS confusion can, I believe, be reduced to a few simple and understandable questions that keep repeating themselves whenever the subject is discussed. These questions are:

1. What is meant by "partnership" in so far as developing our water resources is concerned?
2. Why should the nation undertake a *new* method of developing its water resources?
3. Will this new method *work* or is it just a fancy dream?
4. If others than government agencies develop our water resources, how can proper conservation of these resources be assured?

These are very fair and reasonable questions and deserve to be answered. And the answers must be just as fair and reasonable. More particularly, the answers must be clear and understandable. Actually, the answers are not difficult to find or to state.

The response to the first question in this matter—that is, "what is meant by partnership?"—is that whenever local interests, be they private or public, are able to develop a water resource, they should do so and be permitted to do so without interference by the federal government other than reasonable regulation. When local interests are not able by themselves to complete a justified water resource development, the federal government should join with those interests and fairly assist them. When projects cannot be handled even in part by local interests and these

projects are fully justified in the national interest, then and only then should the federal government undertake the whole project.

The answer to the question of why should the nation undertake a *new* method of developing its water resources is very simply that this method is not at all new. This partnership is nearly as old as the nation itself and has been employed innumerable times. The newness is not in the principle of partnership, but rather in the opposition to the principle!

THE next question is a concern as to whether the partnership principle will work or if, perhaps, it might not be just a fancy dream. The answer has almost been given in the response to the second question. The very fact that partnership has been used so many times and is continuing to be used on new projects starting even now, is the best proof that it is workable, practical, and successful. If it had been a failure it would not have been repeated again and again over such a long period of time.

Finally, there is the question of effecting sound conservation of the water resources if parties other than the federal government are permitted to develop them. To ask this question is to forget the regulatory functions performed by various established government agencies, or to assume these agencies do not fairly carry out their responsibilities. There is adequate government regulatory authority and machinery to assure the application of proper conservation principles when any development is undertaken, by private interests at least. If there is any weakness in this regulation, it is in the lack of adequate regulation of the agencies of the fed-

## "PARTNERSHIP" IN WATER RESOURCES DEVELOPMENT

eral government itself and, in some instances, of local public bodies.

**I** HAVE nothing more to add except some emphasis. And to me there is no more understandable or irrefutable way to supply this emphasis than to cite some historical and current examples of the application of the partnership principle. The list is amazingly long and varied.

Since partnership in hydroelectric power projects is probably the most vigorously debated item, let us look at its historical record. It goes way back to at least 1897 when the federal government built a navigation dam on the Kentucky river. This dam was capable of producing power, but machinery was not installed until 1926

when the Kentucky Utilities Company—a private utility—was granted a license by the Federal Power Commission. The utility pays the government for the falling water.

By 1953 there were at least 26 time-tested examples of partnership on this basis where the federal government built the dam and local interests installed the power facilities and paid for the falling water. The government dams were for navigation, reclamation, flood control, or debris control. These plants are in 13 different states from Vermont to Florida on the East coast, and Washington to California on the West. The local partners include 14 public bodies, 10 private utilities, and two industrial users. Twelve partner-



### PARTNERSHIP PROJECTS BEFORE 1953

<i>State</i>	<i>Project Name</i>	<i>Federal Purpose</i>	<i>Power Licensee or Operator</i>	<i>Year of License or Installation</i>	<i>Administration</i>
Utah	Spanish Fork*	Reclamation	Water users	1908	T. Roosevelt
Arizona	Roosevelt	Reclamation	Water users	1909	Taft
Nevada	Labontan	Reclamation	Water users	1911	Taft
Arizona	South Consol.	Reclamation	Water users	1912	Taft
Arizona	Arizona Falls	Reclamation	Water users	1913	Wilson
Arizona	Cross Cut	Reclamation	Water users	1914	Wilson
Wash.	Rocky Ford	Reclamation	Water users	1916	Wilson
Oregon	Link River	Reclamation	Calif. Ore. Power Co.	1917	Wilson
Arizona	Chandler	Reclamation	Water users	1919	Wilson
New York	Green Island	Navigation	Henry Ford & Sons, Inc.	1921	Wilson
Minn.	Twin City	Navigation	Ford Motor Co.	1923	Coolidge
Florida	Moss Bluff	Navigation	Florida Power Co.	1924	Coolidge
Kentucky	Ohio Falls	Navigation	Louisville Gas & Elec.	1925	Coolidge
Kentucky	U. S. Dam 7	Navigation	Kentucky Utilities Co.	1926	Coolidge
Arizona	Morman Flat	Reclamation	Water users	1926	Coolidge
Arizona	Horse Mesa	Reclamation	Water users	1927	Coolidge
Arizona	Stewart Mt.	Reclamation	Water users	1930	Hoover
Colorado	Grand Valley	Reclamation	Water users	1932	Hoover
W. Va.	Marmet	Navigation	Kanawha Valley Power Co.	1934	F. Roosevelt
W. Va.	London	Navigation	Kanawha Valley Power Co.	1934	F. Roosevelt
W. Va.	Winfield	Navigation	Kanawha Valley Power Co.	1936	F. Roosevelt
Oregon	C Canal Drop	Reclamation	Water users	1938	F. Roosevelt
Calif.	All-Amer. Canal	Reclamation	Water users	1941	F. Roosevelt
Calif.	Narrows	Debris Control	Pacific Gas & Elec. Co.	1941	F. Roosevelt
Oregon	Cove	Reclamation	Pacific Power & Light Co.	1946	Truman
Vermont	Waterbury	Flood Control	Green Mountain Power Corp.	1951	Truman

\*Three plants.

## PUBLIC UTILITIES FORTNIGHTLY

ship agreements have been concluded during Republican administrations, and 14 during Democratic administrations. These projects are tabulated in the accompanying table. (See page 435.)

**A**NOTHER project of large size and complication that attests to the practicability of the partnership principle is the construction of a series of dams on the Grand river in Oklahoma. This was started in 1937 and has been carried on under Presidents Roosevelt, Truman, and Eisenhower. The most recent addition to this series of projects was successfully pushed through Congress by Senator Kerr.

In 1937 the federal government loaned \$16,200,000 and granted \$10,800,000 to the Grand River Dam Authority to build the Pensacola dam. This was a flood-control and power project. The Federal Power Commission issued a license to the authority to install 90,000 kilowatts. Ownership of the entire project in this instance was in the hands of a local public agency.

Some years later the federal government alone built the Fort Gibson dam, also on the Grand river, and Congress provided that it should be operated in co-operation with the locally owned Pensacola dam.

**F**INALLY, in 1954 Senator Kerr of Oklahoma gained a favorable vote in Congress on the Markham Ferry dam—the third unit of this combined project. This legislation was supported by President Eisenhower, and when passed was approved by him.

The Markham Ferry dam and reservoir will be built, owned, and operated by the Grand River Dam Authority. The federal government will contribute to the author-

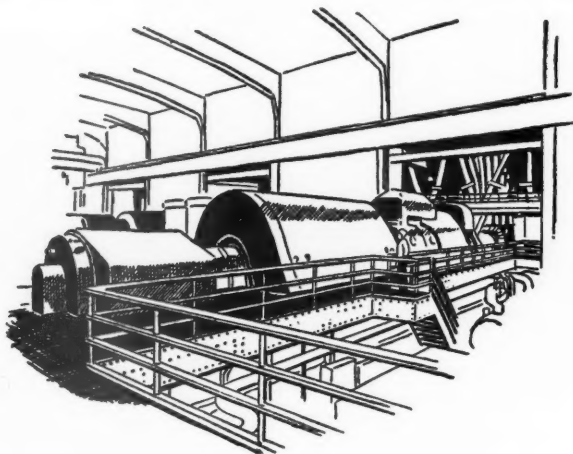
ity not to exceed \$6,500,000 to pay for the flood-control features of the project. Flood-control operation will be in accordance with rules established by the Army Engineers and to assure co-ordinated operation of the other two dams. The remaining cost of the project, estimated at about \$32,000,000, will be provided by the authority from the sale of revenue bonds secured by power revenues from this and other facilities of the authority.

Thus there is here a partnership involving the co-ordinated operation of three dams built in the interests of flood control and power generation, with one dam built, owned, and operated by local interests using loaned and granted federal funds; a second dam built, owned, and operated by the federal government; and a third dam to be built, owned, and operated by local interests with funds partially supplied by the federal government and the remainder by the local interests.

**A**T Priest Rapids on the Columbia river in Washington, another partnership plan has been authorized. This project was earlier (1950) approved by Congress for federal development. It is large and was estimated in 1950 to cost \$364,000,000, of which \$65,000,000 would be for flood control, \$10,000,000 for navigation, and \$289,000,000 for power production.

In this instance the legislation, which was passed by the 83rd Congress and approved by President Eisenhower in 1954, authorizes a local public utility district to develop the project. Its plan must be approved and a license issued by the Federal Power Commission to assure optimum development of the resource.

The legislation provides that if the federal government requires the local utility



### Why Is Hydro Unique among Resources?

**"I**T is somewhat confusing when the opponents of the partnership principle of developing our water resources contend that this is a natural resource that should not be touched by our free enterprise system. Why is it wrong to permit private enterprise, under fair regulation, to manufacture electricity from falling water? If this is wrong, then it must similarly be wrong for private enterprise to use coal, or oil, or atomic energy to manufacture electricity, for all of these are also natural resources. If to generate electricity from natural resources by private enterprise is wrong, then isn't it equally wrong to permit private enterprise to cut trees for lumber, mine minerals, or even use the soil to grow crops?"

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district to include navigation and flood-control facilities as a part of the initial construction, the cost allocated to these features will be paid for by the federal government in the form of a contribution to the district. If such features are not included in the initial construction, the district is required to provide basic facilities for future installation of these features and the cost of these basic facilities will be at the district's expense. Thus, according to present cost estimates, the local dis-

trict would finance approximately \$289,000,000 of the cost, and only if the federal government requires initial inclusion of navigation and flood-control facilities will it participate in the cost. This federal participation is now estimated at a maximum of \$75,000,000.

**A**N unusual partnership provision in the legislation is authority for the local district to have the Army Engineers act as the construction agency since the district is

## PUBLIC UTILITIES FORTNIGHTLY

relatively small and has no adequate construction organization of its own.

ONE of the most interesting of the proposals under consideration by Congress is that of the John Day dam on the lower Columbia river where it forms the boundary between the states of Oregon and Washington. This is a navigation and power dam, estimated by the Army Engineers to cost \$310,000,000, of which approximately \$273,000,000 would be allocated to power production.

A group of local utilities have proposed that they advance to the federal government the full cost of the power allocation and that in return they receive the power from the project for a period of fifty years, less any power needed to operate the dam and its locks. In effect these utilities would pay in advance for their power, and this advance payment would be used to provide funds for construction. Ownership and operation of the dam would remain with the federal government. The federal contribution would be about \$37,000,000.

THE legislation under consideration is such that any local utility wishing to do so may participate in the proposal, and if there are more applicants for power than there is power available, allocation is to be made by the Federal Power Commission. It also provides that the local utilities must pay their proportionate share of the costs of operation and maintenance of the power facilities and portions of the joint project costs allocated to power.

This plan has the merit of providing the navigation facilities which are badly needed now, and the power which the Pacific Northwest will surely need in a few years, without the delay that is inherent

in waiting for large federal appropriations.

It is significant to note that for the Priest Rapids and John Day projects on the Columbia river, the federal government would be expected to invest an estimated \$684,000,000, exclusive of transmission-line costs, and to pay all maintenance and operating expenses unless some partnership arrangement is worked out. It is unlikely that this amount of money will be appropriated by Congress for this one geographical area without extended delay. If, on the other hand, the two partnership plans described above are effected, the federal contribution will not exceed \$112,000,000.

If navigation and flood-control facilities are excluded in the Priest Rapids dam, the federal contribution will be nearer \$37,000,000. This is a much more likely amount to expect Congress to appropriate in the reasonably near future.

IT has been contended that unless the federal government owns and operates all of the principal water-control projects on a stream there can be no effective coordination of the separate projects. If this be true then it follows that where power is involved, as it generally is, the federal government must also own and operate all steam-generating plants and transmission lines that may be tied into the hydro power system. The Northwest Power Pool is a vivid disproof of this all-federal-control theory.

This power pool is in itself a very successful operating partnership. It is a voluntary organization made up of all the principal power-generating bodies in the Pacific Northwest—federal, local public, and private. It includes both hydro and steam

## "PARTNERSHIP" IN WATER RESOURCES DEVELOPMENT

generation—all of the steam being privately owned. In effect, the resources of all of these owners are pooled and by mutual agreement water is stored or released where and when it will produce the greatest benefits. Steam power is used as needed and all generating plants are operated for the good of the whole. A record of exchanged kilowatts is kept and the books are balanced out from time to time. It has been a most effective partnership operation. It is a record of success and not just a theory. Among other things it has had the effect of making available to the area approximately 500,000 kilowatts of capacity that would not be available if the various systems were operated separately. This is equivalent to an additional Bonneville dam, which would cost about \$150,000,000 today.

This record should relieve the mind of anyone who fears that local public ownership of the Priest Rapids dam, local private ownership of the Hell's Canyon dams, or local participation in the cost of the John Day dam, all on the Columbia river system, will do violence to sound development and co-ordinated operation of this water resource.

**I**N northern California there is a proposal to develop the upper reaches of the Trinity river for power and irrigation. The Bureau of Reclamation has a plan which is estimated to cost \$219,067,000. Of this amount \$156,528,000 would be allocated to power and the remainder to irrigation, municipal and industrial water, and fish and wild-life protection.

The Pacific Gas and Electric Company has made a proposal that it build all the power plants and transmission facilities under the existing licensing provisions of

the Federal Power Act in very much the same manner as was done in those numerous cases described in the first part of this article. According to the company estimates, this would reduce the federal investment by some \$50,000,000 and during the 50-year license period it would pay the government \$3,500,000 per year for the use of the falling water to generate power. This is estimated by the company to be \$36,000,000 more net revenue than the federal government would receive from power sales if it does its own generating and sells at existing federal rates in this area. In addition, the company estimates it will pay \$135,000,000 in taxes, of which \$70,000,000 would be federal and \$65,000,000 to state and local governing bodies.

This project was authorized just before the Congress adjourned in 1955. The authorization includes a condition that the Department of the Interior fully investigate the proposal of the company and report to Congress on this phase of the plan within eighteen months.

The Hoover dam project has partnership features worthy of note. The dam was built by the federal government. The power-generating facilities are financed by the government, but are only installed when local interests make firm contracts for long-time purchases of the energy and provide the transmission lines at their own expense. These local interests are both public and private.

**T**HERE are innumerable navigation projects in which local interests join with the federal government. The most usual responsibility of the local interests is to provide the areas into which the material dredged from the channel may be de-

## PUBLIC UTILITIES FORTNIGHTLY

posited. Local interests often provide other contributions. One such partnership arrangement may be found at Portland, Oregon. In this instance the Port of Portland provides a large dredge which is available to the Army Engineers for channel dredging as needed and costs are shared. The port also provides deposit areas for the dredged material.

IT is somewhat confusing when the opponents of the partnership principle of developing our water resources contend that this is a natural resource that should not be touched by our free enterprise system. Why is it wrong to permit private enterprise, under fair regulation, to manufacture electricity from falling water? If this is wrong, then it must similarly be wrong for private enterprise to use coal, or oil, or atomic energy to manufacture electricity, for all of these are also natural resources.

If to generate electricity from natural

resources by private enterprise is wrong, then isn't it equally wrong to permit private enterprise to cut trees for lumber, mine minerals, or even use the soil to grow crops? Is there something separate and peculiar about our water resources that justifies the application of a basically different set of rules and principles to their development than are applicable to our other natural resources?

This writer cannot satisfy himself that this is the case. He strongly believes that it is equally proper for local enterprises—public and private—to participate fully in the development of all our natural resources under fair and proper regulations.

The record of partnership in natural resource development is long and it is successful. It deserves more extended application rather than less, for if we are to proceed with needed development of our water resources it will require the combined efforts of all agencies—federal, local public, and private.

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**T**HE very word 'commerce' is filled with connotations characteristic of our problems of the day. Commerce based upon the productivity, the energies and the brains of men, likewise provides that material base to satisfy the material and physical wants of man and on which are built those opportunities for cultural and spiritual advancement so necessary to his well being, his progress, and his happiness. . . .

"Commerce, its free propagation and progress in this country, has brought today the great organization—this great institution that we call modern America. . . .

"And though today we talk about a greater need for governmental relationships with the private individual, and with business, and with our various localities, yet we forget that basic principle at our peril, and we must not—ever—no matter what we hope for in the way of advantage from governmental regulation or direction, or any kind of regimentation, we must never accept, if it means the surrender of this vital principle: of living by our own initiative and our individual freedoms to develop ourselves physically, intellectually, and spiritually."

—DWIGHT D. EISENHOWER,  
President of the United States.



## Realistic Regulation in an Expanding Economy

When a state grows as fast as Florida, the very dynamic character of necessary economic changes creates special problems requiring new concepts and approaches. This is just as true in the field of public utility regulation as in the field of other business and industrial operations.

By P. M. SCHUCHART\*

**T**HIS, the second half of the twentieth century, presents to each of us each day problems unheard of—problems almost undreamed of. Atomic generation of electrical energy is at our doorstep; while in communications, electronic switching and customer long-distance dialing are out of the laboratory—no longer merely a gleam in the eye of the scientist.

These problems nation-wide are coincident with normal and natural growth, as well as changes and improvements in the art.

These problems, section-wide, are brought more sharply into focus by increased development of natural resources,

redployment of existing or establishment of new industry, and by a shift of population.

All of these have had and are having a profound effect on Florida. The reliable Florida sun, our priceless asset, draws tourists all year long—5,000,000 of them this year. Some of these tourists stay as farmers or workers and more would like to. Many return as senior citizens, with their pensions or annuities, flocking to take advantage of our friendly climate and spend the fall of their years in well-deserved restful peace and slothful ease.

Put these all together and they spell expansion with a capital "E," and growth with a capital "G."

Careful analysis of the results already

\*Director, public utilities department, Florida Railroad and Public Utilities Commission. For additional personal note, see "Pages with the Editors."

## PUBLIC UTILITIES FORTNIGHTLY

achieved to meet this challenge of expansion, and the well-formulated plans for the immediate future, bring a reaction not unlike that of the Pennsylvania Dutchman the first time he saw a giraffe at the Allentown Fair. Taking one look at the long neck, the strangely shaped head, and the distinctive coloring, he exclaimed, "It's a damn lie! There ain't no such animal."

**L**ET us take a quick look at the startling statistics of our substantial and permanent growth. The investor-owned power companies, excluding REA co-operatives and municipally owned operations such as Jacksonville, Orlando, Key West, and Tallahassee, in 1955 added over 70,000 new customers, with gross plant additions of over \$83,000,000.

Telephone companies, Bell and independent, had a net station gain of over 85,000 with gross plant additions of over \$65,000,000. And still almost 50,000 await service pending completion of construction projects involving new buildings, new and increased central offices, and additional outside plant.

The manufactured gas industry in the last three years shows an increase of almost 1,800 new customers, with gross plant additions of almost \$2,500,000.

Provisional estimates of these utility companies from 1955 through 1960 anticipate more than 450,000 new power and gas customers and a net station gain of 600,000 telephones. To meet these growth demands will require gross plant additions of about \$1 billion.

These figures of past results have not been dreamed up by any bureaucratic agency. They have been taken directly from the annual reports filed with our commission.

MARCH 29, 1956

**A**s to future plans, neither have these figures been dreamed up by any bureaucratic agency, whose chief accomplishment is the operation of a calculating machine or the manipulation of a slide rule. These figures have been provided by hard-boiled management of the companies involved, whose responsibility it will be to raise the funds necessary, and who may one of these days come into your office—not hat in hand—but with a solid prospectus, giving you an opportunity to invest in the fastest-growing state in the Union.

For those in the public utility business what does this mean?

For the electric industry it means more generating plants, more transmission lines, more distribution, and the opportunity to contribute to the communities' growth.

For the communications industry it means more central offices, more outside plant, more toll facilities, and more service to more people.

For the gas industry it means more production capability, more extension of mains, and the acceptance of the responsibilities of service.

For all it means more of everything—more careful management—more efficient operation.

**B**UT, above all, it means recognition of the fact that a public utility is a public trust and not private opportunity for private exploitation.

For those in public utility regulation what does this mean?

It means the bold and forthright execution of the functions traditionally, historically, and legally assigned to these agencies.

But what are these functions?

## REALISTIC REGULATION IN AN EXPANDING ECONOMY

The first function is the traditional and historical one—to protect the public from the utility. Far be it from me to even attempt any picture of the big, grasping utility about to swallow or trample an unsuspecting public. Far be it from me to even attempt any picture of any utility as being the acme of altruism. I do submit, however, that either such picture would be merely a caricature, drawn and publicized by those who find themselves completely unacquainted with the facts, or who point to such an apparition as a means toward a political end.

The second function is to protect the utility from the public. There have been, and there always will be, those who op-

pose anything and everything a utility proposes. It is immaterial whether the proposal is for permission to expand its financial or corporate structure, acquire additional territory into which to extend its facilities and services, or to secure an adjustment in rates. Sometimes, I suspect, there are even those who would oppose a rate decrease purely on the principle that they are "agin" everything a utility is for. Truly, they would beware of the Greeks when they are bearing gifts.

THE third function, strange as it may seem, is to protect a utility from itself. This is not only in connection with rates and charges for services rendered, ac-



### GRAND TOTALS—ELECTRIC, TELEPHONE, AND GAS

Gross Plant Additions:	
1953 .....	\$ 124,791,074
1954 .....	134,046,880
1955 .....	143,743,260
3-year Total .....	\$ 402,581,214
Total Assets at Close of 1955 .....	\$1,053,987,951
Provisional Estimates of Gross Plant Additions:	
1956 .....	\$ 169,451,697
1957 .....	188,819,335
1958 .....	188,117,448
1959 .....	195,726,436
1960 .....	207,944,500
5-year Total .....	\$ 950,059,416
Net Gains in New Customers:	
1953 .....	141,637
1954 .....	134,954
1955 .....	154,447
3-year Total .....	431,038
Total Customers Served at Close of 1955 .....	1,891,799
Provisional Estimates of Net Gains in New Customers:	
1956 .....	183,044
1957 .....	182,342
1958 .....	186,588
1959 .....	189,094
1960 .....	192,251
5-year Total .....	933,319
Provisional Estimate of Number of Private Utility Customers at Close of 1960: .....	
	2,825,118

## PUBLIC UTILITIES FORTNIGHTLY

counting procedures and depreciation computations, but also willingness or unwillingness to extend or expand facilities.

The fourth function is to supervise and permit the construction and application of such rates as will protect the capital embarked in the enterprise—to permit the utility to earn enough to attract additional capital necessary to enable it to render adequate service. When rates accomplish this, they are fair and equitable to the owners of the capital. They maintain the financial soundness and integrity of the business. They are fair to the consumers, for it is indeed the consumer, and no one else, who pays for the cost of service.

How has the Florida commission accepted its responsibilities for this bold and forthright execution of its functions?

Let us look at the record.

### *The Rate Base*

**B**y law this commission is required to "investigate and determine the actual legitimate costs of the property of each utility company, actually used and useful in the public service, and keep a current record of the net investment of each public utility company in such property, which value, as determined by the commission, shall be used for rate-making purposes and shall be the money honestly and prudently invested by the public utility company in such property used and useful in serving the public, less accrued depreciation, and shall not include any good will or going concern or franchise value in excess of payment made therefor."

For the plant investment in the rate base the Florida commission has chosen to use the investment level at the end of the test period rather than the average investment. Surely, in an expanding economy, this

year-end investment needs no defense, but a case in point is that of the Florida Power Corporation decided in July, 1953. The investment at the end of the test period amounted to some \$93,000,000—the average investment for the test period was some \$87,000,000, but by the time the case had been presented and was ready for adjudication the actual investment amounted to some \$103,000,000. Since rates are being set for the present and for a reasonable time in the future, with all fairness the end-of-the-year investment must be used.

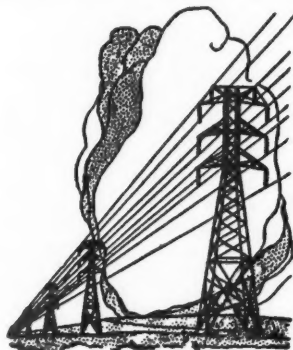
**W**ORKING capital is a legitimate requirement and deserves a well-defined place in the rate base. In that same case, the commission allowed one-eighth of the company's annual operating and maintenance expenses and costs. An additional allowance was made to cover prepayments at the end of the year properly chargeable to operating expenses, but which at that time had not been transferred to the appropriate accounts.

As for construction work in progress, we include as part of the rate base that work completed and in service but which has not been transferred to the appropriate plant accounts. Construction work in progress on which no interest has been capitalized is also allowed as part of the rate base. It is also our policy to allow plant held for future use where such property is owned and held for imminent use in serving the public under a definite plan for such use.

### *Rate of Return*

**I**T seems inconceivable that the rate of return, as important as it is, in a discussion like this, can be dismissed with a

## REALISTIC REGULATION IN AN EXPANDING ECONOMY



### ELECTRIC UTILITIES

<b>Gross Plant Additions:</b>	
1953 .....	\$ 77,507,905
1954 .....	75,968,929
1955 .....	82,537,040
3-year Total .....	\$236,013,874
Total Assets at Close of 1955 .....	\$685,320,217
<b>Provisional Estimates of Gross Plant Additions:</b>	
1956 .....	\$ 86,428,497
1957 .....	88,276,833
1958 .....	90,277,248
1959 .....	97,304,736
1960 .....	105,214,800
5-year Total .....	\$467,502,114
<b>Net Gains in New Customers:</b>	
1953 .....	63,211
1954 .....	59,804
1955 .....	70,260
3-year Total .....	193,275
Total Customers Served at Close of 1955 .....	881,577
<b>Provisional Estimates of Net Gains in New Customers:</b>	
1956 .....	69,342
1957 .....	72,598
1958 .....	76,560
1959 .....	81,130
1960 .....	82,506
5-year Total .....	382,136
Provisional Estimate of Number of Electric Customers at Close of 1960: ..	1,263,713

few words. Yet, that is exactly what I am going to do, for the Florida commission has never been greatly concerned over the rate of return as the rate of return. It has

been much more interested in the dollar requirements of the utility. How many dollars does the utility require in order to meet its operating expenses, depreciation

## PUBLIC UTILITIES FORTNIGHTLY

charges, taxes, maintenance expenses, debt service, dividend requirements, and to transfer a reasonable amount to surplus? When the commission has been able to determine the answers to these questions, then the rate of return becomes a simple matter of computation.

Small companies have more serious problems in raising funds for expansion and their cost of capital is higher. This we have recognized. A small independent telephone company in Quincy was permitted a return of 8 per cent. The Inter-County Telephone & Telegraph Company, a larger company, was permitted a return of 7 per cent. In 1952 Southern Bell Telephone & Telegraph Company was per-

mitted a return of 6.12 per cent. In that same year the Peninsular Telephone Company, one of the largest independent companies in the United States, was permitted a return of 6.8 per cent, and in July, 1953, the Florida Power Corporation was allowed 6.45 per cent.

**R**ETURNING to the Florida Power Corporation order, in discussing the rate of return, the commission said:

At the present time a rate of only 6 per cent would not appear to be fair and reasonable for a public utility which is engaged in a tremendous expansion program which must be financed by the issuance and sale of large amounts of



### TELEPHONE

Gross Plant Additions:	
1953 .....	\$ 46,425,052
1954 .....	57,436,710
1955 .....	60,321,478
3-year Total .....	\$164,183,240
Total Assets at Close of 1955 .....	\$364,184,795
Provisional Estimates of Gross Plant Additions:	
1956 .....	\$ 91,281,200
1957 .....	99,545,502
1958 .....	96,874,200
1959 .....	97,455,700
1960 .....	101,763,700
5-year Total .....	\$486,920,302
Net Gains in Stations:	
1953 .....	76,009
1954 .....	74,635
1955 .....	85,353
3-year Total .....	235,997
Total Stations Served at Close of 1955 .....	1,110,000
Provisional Estimates of Net Station Gains:	
1956 .....	110,017
1957 .....	105,929
1958 .....	105,658
1959 .....	103,569
1960 .....	105,300
5-year Total .....	530,473
Provisional Estimate of Number of Stations at Close of 1960: .....	1,640,473

## REALISTIC REGULATION IN AN EXPANDING ECONOMY

bonds and stocks of the utility. In view of the current cost of capital and the condition of the money market of today, concerning which there appears to be no immediate prospect for improvement, a rate of return of something in excess of 6 per cent, but less than  $6\frac{1}{2}$  per cent, would in our opinion be reasonable. In our opinion applicant would require a rate of return of 6.45 per cent in order to pay its taxes, depreciation expenses, debt service, and provide a fair and reasonable rate for its common stockholders.

After all, the objective in utility rate making is to develop rates that are fair and

reasonable. Fairness and reasonableness are qualities to be determined by the judgment of reasonable-minded men and cannot be determined with hair-line precision by the application of mathematical formulas.

### *Automatic Adjustment Clauses*

THE Florida commission has authorized the use of automatic fuel and commodity adjustment clauses.

"Fuel clause adjustment" provides for an adjustment to the base rate in response to changes in the cost of fuel as fuel and nothing more. No adjustment is made for changes in efficiency from the viewpoint of thermodynamics.



### GAS UTILITIES

Gross Plant Additions:	
1953 .....	\$ 858,117
1954 .....	623,241
1955 .....	884,746
3-year Total .....	\$ 2,366,104
Total Assets at Close of 1955 .....	\$31,482,939
Provisional Estimates of Gross Plant Additions:	
1956 .....	\$ 886,000
1957 .....	997,000
1958 .....	966,000
1959 .....	966,000
1960 .....	966,000
5-year Total .....	\$ 4,781,000
Net Gains in New Customers:	
1953 .....	2,417
1954 .....	515
1955 .....	(1,166)
3-year Total .....	1,766
Total Customers Served at Close of 1955 .....	143,156
Provisional Estimates of Net Gains in New Customers:	
1956 .....	3,685
1957 .....	3,815
1958 .....	4,370
1959 .....	4,395
1960 .....	4,445
5-year Total .....	20,710
Provisional Estimate of Number of Gas Customers at Close of 1960: ....	163,866

## PUBLIC UTILITIES FORTNIGHTLY

Such an adjustment in utility rate structure is a reliable and dependable tool that can be used to automatically adjust revenues, compensating for changes in fuel costs, and these costs have a notorious record for unreliable behavior.

Such a clause is realistic. It is based either on the kilowatt-hours per ton of coal, per barrel of oil, or for Mcf of natural gas. It is based on operating data that can be readily and accurately obtained and checked at any time.

The plan is equitable. If the price of fuel decreases, the customer immediately receives the benefits of the operating cost savings. If the price of fuel increases, the company is protected by the automatic operation of the clause.

The clause is practical. It is one of the most practicable tools in our free enterprise system. By utilizing it, the company and the prospective customer can enter into a long-term contract and be reasonably certain the benefits and costs associated with the contract will be equitably and promptly proportioned to the changes in cost levels.

It is an automatic regulator, with the inherent ability to provide a considerable amount of relief to presently overburdened regulatory dockets.

A COMMODITY adjustment is warranted only if the following conditions are fulfilled:

(1) The commodity index employed must be developed and published by an impartial and competent government agency, such as the U. S. Department of Commerce.

(2) The basic rates to which the factor is to be applied must be just and reasonable and properly reflected in the basic operating and maintenance costs.

(3) It must be so devised that its application to the basic rates will always result in billing rates which are just and reasonable under the economic conditions then prevailing.

(4) The price fluctuations must be indicative of, and comparable with, fluctuations in operating and maintenance costs.

THESE adjustments do not usurp or delegate regulatory authority. They certainly tend to make costly rate investigations less frequent. They provide flexibility where it is needed, when it is needed, and in direct proportion to the need, and that is realistic regulation.

By this realistic and progressive regulatory supervision, helpful but firm, the Florida commission has accepted its responsibility to provide with all possible haste increased and adequate facilities and, at the same time, maintain the financial integrity of the investor-owned utilities.

This is our philosophy—this is our policy—deliberately conceived and conscientiously executed.

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**"I** BELIEVE we can look forward to one thing with confidence. The demand for capital will continue to be large. I am sure that ten years from now we will not have to scratch around to find places to put our policyholders' money. I think our problem as an industry and as a nation is going to be to find enough savings to finance the things that can and should be done."

—O. KELLEY ANDERSON,  
President, New England Mutual  
Life Insurance Company.



## College-Business Exchange Program

*The Foundation for Economic Education has found that many educators on the college and university level have moved directly from their graduate and undergraduate courses into the teaching profession. Accordingly, a worth-while program is being conducted to bring teachers and workers together for better mutual understanding.*

By W. M. CURTISS\*

**I**t is increasingly more important that the citizen and his family really understand and know how American business operates. Far from being the result of activity by a few key human dynamos, the success of our business enterprise is the acknowledged product of a large number of people. American business people are numbered in the millions. Because of their very preoccupation with their daily tasks, few get the opportunity to explain their part in the over-all pattern of our society to themselves or to others. Indeed,

many are so busy making a living for themselves and their family that they have not taken time to orient themselves in relation to economic activities only slightly removed from their own immediate operations and those of their close associates.

Utilities, as in the case of other industries, frequently hold "open house" at the dedication of a new plant, a new modern office building, or on an industry anniversary. In this way a select cross section of the public may get a brief glimpse of the workings inside a utility company which it would never get otherwise. This process, however valuable in good community relations, has its limitations.

\*Director, college-business exchange program, Foundation for Economic Education, Irvington-on-Hudson, New York. For additional personal note, see "Pages with the Editors."

## PUBLIC UTILITIES FORTNIGHTLY

Many citizens, young and old, have never stepped inside the local steam or hydro station, central exchange, or transit garage, yet they have formed some mental impression of the industry from an indirect source. The schoolteacher and the college professor have, not infrequently, passed on to the many hundreds of individuals seated before them at one time or other a particular impression, favorable or otherwise. In an earlier issue of the FORTNIGHTLY an article was presented showing how one community (Baltimore, Maryland) took special care to see that its public and private schoolteachers were given an opportunity to get the real inside information on local business operations, including the utilities.<sup>1</sup> Other earlier and subsequent features have touched upon this and similar community relations-building opportunities. Some attention has been devoted to the college and university level professor. Several universities, notably on the West coast (Stanford) and on the East coast (Columbia) and in the Midwest (University of Michigan) among others, have held seminars for utility executives. But, what we are presently concerned with is the opposite side of the coin—getting the university professor to know the utility company from a closer vantage point.

ONE organization which devotes part of its time to promoting these closer business-college ties is the Foundation for Economic Education. Through its college-business exchange program, over a period of eight years, 591 professors from 281 colleges and universities have studied business firms in all sections of the United

States. The fellowships in business set up by the foundation make it possible for college professors of economics, business, and related fields to spend a few weeks with a business firm during the summer and to discover what goes on in that world. The objective of the program is to give the candidate a fairly comprehensive picture of business operations. This is done largely through interviews with supervisors and top executives. The fellows are interested in problems of pricing, cost analysis, incentive systems, business research, advertising, finance, and industrial and public relations.

THE foundation finds that many of the educators on the college and university level have moved directly from their undergraduate and graduate courses into the teaching profession. Each of these teachers may influence thousands of students, many of whom are destined to become leaders in business and government. Such teachers admittedly need more than a textbook knowledge of the business world.

Hence, the college-business exchange program performs a vital function. It offers a chance to throw new light in corners where perhaps some slight prejudice may have lurked, whether passed on unwittingly or otherwise. And, even where bias did not enter, the academic version of what makes private enterprise tick was largely theoretical. In these fellowships the professors now have an avenue of egress to firsthand acquaintance with the basic integrity and fairness of most American businessmen and the complex problems they face. Several utility companies have given the academicians a foothold in the often misunderstood field of rendering a public utility service.

<sup>1</sup>"Telling Teachers about the Utilities," by James H. Collins, PUBLIC UTILITIES FORTNIGHTLY, March 17, 1955, p. 302.

## COLLEGE-BUSINESS EXCHANGE PROGRAM

In 1948, FEE (as the foundation is more popularly known) set up the college-business exchange program to provide "fellowships in business" for college professors who can devote six weeks out of their summer to an on-the-spot study of a business firm. During the eight years a total (duplications eliminated) of 591 teachers were awarded fellowships by 130 business firms, some 11 of which were operating utility companies. The table below shows how the program grew over the span of its existence to date.

In 1954, for the first time, the number of applicants for fellowships greatly exceeded the number available. In 1955, nearly 500 applications were received, again greatly exceeding the number of available openings. Quite obviously, judging from this record, more business firms are needed to meet the requests coming from college professors.

THE participating business firm selects its own candidate from recommendations made to the firm by the foundation. Usually FEE makes three or more recommendations with supporting data for each fellowship. Most firms sponsor only one candidate, but in 1955, 30 firms had two or more. Participating industrial organizations find they can handle two or more fel-

lowships about as easily (costwise and otherwise) as one. Most professors say they get more out of the program when there are two or more together on a project. One participating management observed:

We have found . . . that four participants give us the most effective training results. Four fellows can be handled effectively by a department head, but more than four would often require special meeting facilities. In addition, having four participants with diversified backgrounds in each group enlivens the discussions which results in a greater exchange of ideas and better benefits to all concerned.

The company pays the professor's transportation plus \$600 living expense for the six weeks. The program is carried out by the company, in some cases with FEE's recommendations as to the content of the 6-week program. That is, if called upon by the participating industry to do so. In many cases the company assigns a specific project to be studied. However, as a general rule, the over-all interview approach has been adopted by participants. The project method—if it is to be successful—must be carefully conceived, intelligently guided, and wisely executed by the teacher.



EIGHT-YEAR SUMMARY OF PROGRAM

	<i>Fellows</i>	<i>Colleges</i>	<i>Firms</i>	<i>(Utilities)</i>
1948 .....	9	7	6	
1949 .....	32	27	21	
1950 .....	69	57	50	2
1951 .....	87	63	60	2
1952 .....	106	83	64	6
1953 .....	120	101	71	6
1954 .....	121	90	72	7
1955 .....	108	92	69	8
1956 .....				9* (Est.)

\*Four manufacturing subsidiaries not included in this figure.

## PUBLIC UTILITIES FORTNIGHTLY

Experience has indicated that, for most firms, a 6-week period is none too long to cover the ground desired. Some few firms have shortened the term slightly.

Some professors have expressed a desire to spend some time with foremen, hourly rated personnel, and union officials. This generally can be arranged. Participating business firms are asked to encourage completely free inquiry into all phases of their operations. Teachers are expected to approach their study with the spirit of inquiry and open-mindedness appropriate to any research project. Some type of a report of his experience is ordinarily prepared by the fellow for the business firm.

EACH fall, FEE announces the program to about 25,000 college professors. The professors' responses indicate the type of business in which they are interested and the time they are available. When FEE receives them, it processes the applications sent in by the professors, their supporting evidence, references, etc., and then sets about the chore of matching the professors' preferences with the preferences of likely sponsors. FEE acts only in a liaison capacity. No formal, binding agreement between the sponsoring firm and the professor is involved and the sponsor is under no obligation to take a candidate until it has an FEE recommendation that it considers satisfactory.

Among the benefits which professors say they have received from their experience with business firms, these are most frequently mentioned:

1. They saw the internal workings of a business.
2. They gained an insight into management problems.

3. Some had an opportunity to check their theories against actual business experience.

4. It enabled most of them to develop case material for classroom or research use.

A public utility company, asked why it participated in the fellowship program, replied:

Participation in the program was undertaken because it was felt that it is a civic duty of corporations to assist, in a reasonable manner and to a reasonable extent, college professors in improving their effectiveness through increasing their knowledge of the subjects they are teaching.

It was also felt that in pursuing such a course there should be a better understanding between the manager of business and the colleges and universities, which would result in a more realistic understanding of what the free enterprise system in the United States has contributed and is contributing to the American way of life.

A LARGE petroleum firm felt that it could benefit by having the opportunity of getting an outsider's candid opinion of the things the company was doing.

Asked about the tangible benefits to the firm, two different utilities replied:

We consider it possible that a benefit occurs when department heads and supervisors review the departmental organization and procedure with outsiders of the caliber of college professors. It is also possible that eventually better-trained college graduates will be taking up employment in industry.

\* \* \* \*



### Teaching the Teachers about Business Facts

**"T**HE foundation finds that many of the educators on the college and university level have moved directly from their undergraduate and graduate courses into the teaching profession. Each of these teachers may influence thousands of students, many of whom are destined to become leaders in business and government. Such teachers admittedly need more than a textbook knowledge of the business world. Hence, the college-business exchange program performs a vital function. It offers a chance to throw new light in corners where perhaps some slight prejudice may have lurked, whether passed on unwittingly or otherwise."

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Our participation in the program has had the effect of stimulating the thinking of managerial personnel with whom the professors come in contact. It has brought about a more complete understanding of their own functions when they are faced with the necessity of explaining their work and its objectives to the professors. On a long-term basis, it would seem that business generally would have a more friendly atmosphere in which to operate if this type of program were participated in by a majority of firms. (Better regulatory climate.)

**Q**UERIED on how individual utilities have handled professorial requests for more contact with labor leaders, shop stewards, hourly workers, etc., three answered as follows:

We have not had insistent requests for contacts with labor leaders, shop stewards, or hourly workers. We do not shield the fellows from the people at the worker level although their contacts happen to be with white-collared departments. Free discussion may not be possible during periods of negotiations or settlement of grievances. Under such circumstances it is necessary to keep

## PUBLIC UTILITIES FORTNIGHTLY

some information confidential. If a proper explanation is made, we have had no difficulty in satisfying inquiries in this field. (Utility No. 1.)

\* \* \* \*

We try to arrange whatever contact they wish to have though in recent years we have been in the midst of negotiations at that time (July-August) and have not wished to risk any disturbance. (Utility No. 2.)

\* \* \* \*

All professors participating to date have had the opportunity to sit with the officers of the union behind closed doors and, in the absence of any management personnel, to talk over the labor situation within the company to any extent or direction they care to. (Utility No. 3.)

**W**HAT do the professors do and what do they say about their part-time utility occupation? Here are some of the results disclosed by reports of individual experiences:

This summer's college-business exchange program provided me with an opportunity I've wanted for a long time, the chance to observe the operations of a large firm without interference of any kind.

\* \* \* \*

... Generally speaking, the program achieved two very important results. ... the program ... is in many ways the equivalent of business experience. Such experience should make teachers more confident and more competent.

Other typical comments: "It did not seem possible when I began the program

that I could learn so much in so short a time." (Professor A.)

"I was surprised and pleased that we were allowed the utmost freedom (even encouraged) to inquire into any phase of the company's activities." (Dr. B.)

"Although I have been studying in the field of transportation for more than twenty-five years, never until now have I appreciated the tremendous managerial and communication problems that a railroad faces." (Professor C.)

The reports submitted by departing professors upon returning to their fall school terms disclose interesting reactions to their utility experience:

The most significant fact I observed ... is the "teamwork" within the company. This teamwork shows itself in a number of aspects. ...

There is another quality about your company that I would like to call a "calculated buccaneering spirit." This may be described as a willingness to listen to new ideas, and to try something out if it looks good, whether or not it has been tried before.

Said one departing academician in a letter to the management of a large mid-west gas utility company:

... You will note that all of my impressions are favorable. In all sincerity I want to say that I am not trying to omit any unfavorable impressions; I just haven't been able to form any.

**I**N a public statement to the company's employees, a prominent figure in the utility industry paid an excellent compliment to the fellowship idea:

The foundation professors are fine

## COLLEGE-BUSINESS EXCHANGE PROGRAM

men. They give us their summer vacation period to go to business firms in order to learn more about American business and become better teachers. We can learn also from them. Bringing teachers and workers together brings about better mutual understanding and the result is a two-way street. Many of you will recall meeting our academic visitors and helping them toward a better understanding of business practices and procedures. Their letters to us after they finish the program are full of compliments of the many individuals who helped them, found answers, cleared up their misunderstandings, and removed their doubts. Others of you will have contacts with many like them . . . dur-

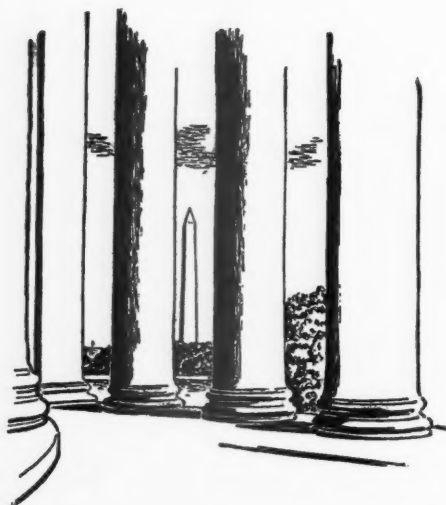
ing future years. I do hope you will be happy to give them an understanding of how our company operates. Through their observation in the "great big middle" of our company they will gain insight into business problems. They will have a chance to check their opinions and beliefs against actual experience. They undoubtedly obtain specific information which they can use in the classroom and which will be of benefit to their students, the coming generations of young men and women of America. I am sure they return to their respective schools and colleges better teachers and I have a hunch that those of us who have talked to them will know more about teaching and, perhaps, life.



## Taxes and Freedom

**"I** THINK there is a very definite and distinct limit to what this country can charge its taxpayers over an extended period. I think that it gets right back into what makes a democracy tick, and into what is the difference between a free country and a slave state. The difference between a free country and a slave state—in my point of view—is our individual incentive system, freedom of individual choice, our freedom of individual opportunity, that lets free men go out and work for an incentive and not because they are told to 'do it or else.' Our material incentive, not our spiritual incentive, is a money incentive, and that money incentive, if it is destroyed by too much taxation, if it is reduced so far that it isn't a real incentive, can destroy our whole freedom because that will destroy free activity. That means that if you don't get free activity, you have to have slave-state activity; you have to be told, and you are going to have a dictator to tell you. I think things that contribute to the destruction of our free-incentive system are wrong. A trend against that free-incentive system is wrong, and should only be temporarily engaged in in the event that war or something of that kind requires it. Otherwise, it should be reduced."

—GEORGE HUMPHREY,  
Secretary of the Treasury.



## Washington and the Utilities

### *Politics and Utility Issues*

THE dramatic announcement by President Eisenhower on February 29th that he would be a candidate for re-election has already changed the composition of the Washington picture for public utilities to some extent. The President's choice might fairly be considered, in this regard, as the central development of a broader political background, which included the veto of the controversial Harris-Fulbright Bill.

This is not to suggest that the White House disapproval of the bill, which would have exempted independent natural gas producers from FPC control, was part of any preconceived build-up for the Eisenhower candidacy. But it is a fact that it adds up to adroit strategy, even though it came about coincidentally, in any political program to return the Chief Executive to the White House for another four years.

First of all, it is a fact that the veto took a number of Republican Congressmen off the hook in the light of the disclosures which have been subsequently forthcoming concerning campaign contributions by gas and oil interests supporting the Harris-Fulbright Bill. If the bill had

become law, a number of Congressmen of both parties who voted for it might find themselves in an unexpectedly vulnerable position (as far as political opposition is concerned). But the President's veto, pitched as it was on moral grounds while expressing sympathy for the merits of the Harris-Fulbright Bill in principle, effectively torpedoed any such campaign issue.

Obviously, there cannot be much of a campaign argument against those who voted for a bill which did not pass, even though its defeat had to be accomplished by a presidential veto. The veto itself permits further consideration of such legislation on its own economic merits. Of course, any such bill has become political poison for this session of Congress and neither party would touch it. More than that, additional disclosures, which may be forthcoming in the Senate's investigation of the gas-oil lobby, may handicap the chances of such legislation even in the next session of Congress, regardless of the outcome of the fall elections. That remains to be seen.

BUT there are other and broader ramifications of both the Eisenhower can-

## WASHINGTON AND THE UTILITIES

didacy and the gas bill veto. It has already been noted by Washington observers that the gas bill veto just about shattered the so-called "give-away" issue — an issue which had been carefully built up by the public power bloc in an effort to undermine confidence in the administration's public power policies and discredit the electric utility industry. The President now emerges as the only governmental force which could have prevented, and did prevent, a so-called "giveaway" of regulatory control over gas production, which pushed through Congress under the sponsorship of the leadership of the political opposition. This may be an unfair picture. But it is the picture which campaign orators are likely to draw on the Republican side.

And now that the President is once more a candidate, the practical outlook is for somewhat less emphasis on utility industry criticism in the forthcoming campaign than might be the case if the Republicans had to resort to another standard-bearer. It is likely that both the so-called "public power" issue, as well as the "give-away" issue, will make much less impression on the electorate. While some regional use may be made of these issues by local candidates, such as the McKay-Morse senatorial battle in Oregon, they will not stack up as decisive on the national level.

**I**F Stevenson is the Democratic candidate, his party platform and campaign strategy may be to drop both of these as ineffective, if not obsolete, in the light of recent events. Other Democratic candidates, however — such as Senator Ke-fauver (Democrat, Tennessee) — may feel that the party has put too much effort into such items as the Dixon-Yates contract and the Hell's Canyon controversy to give them up entirely. International peace, adequacy of defense, domestic pros-

perity, farm prices, segregation, etc., are much more likely to get top billing.

### *Bills in Congress*

**A** HOUSE Appropriations subcommittee has apparently reaffirmed a TVA-claimed right to use its own corporate funds to add a new unit to an existing steam plant. A fourth generating unit at the John Sevier plant will be constructed by the TVA with funds available to the agency from power sale proceeds and other revenues. In allowing the use of such procedure, the House group in turn denied a specific budget request for a \$3,500,000 appropriation to construct the new generating unit, contained in the Supplemental Appropriations Bill for fiscal 1956.

The Appropriations subcommittee "directed" the TVA to proceed with the use of its own funds to construct the unit, thus providing some semblance of congressional supervision over the TVA in the use of its funds for steam unit construction. But the federal agency had already gone ahead and committed such funds, without congressional approval, to such purposes by entering into agreements with equipment manufacturers pertaining to the steam plant unit as early as last September.

Whether TVA will hereafter have a claim on blanket congressional authority to use its own revenues for expanding authorized plant facilities is not clear. Senator McClellan (Democrat, Arkansas) has been consistently opposed to such fiscal independence for TVA and the situation may undergo further clarification when the Appropriations bill reaches the Senate, where McClellan is a powerful member of the Senate Appropriations Committee.

**A** PROPOSED 40 per cent increase in Southwestern Power Administration power rates by the Interior Department

## PUBLIC UTILITIES FORTNIGHTLY

has run into stiff congressional opposition. It is now likely that no change in existing rates will be made, for the time being at least. Interior Department officials, who have recently testified before members of Senate and House Public Works subcommittees, meeting in joint session, defended the hike in power rates as "fair and equitable" to users. But they indicated a willingness to hold off on asking FPC approval of the increase, pending congressional consideration of the problems involved. The proposed rate change results from adoption of a new formula for allocating costs of construction of multipurpose federal dams which Interior claims would more accurately reflect the proportion of benefits to power users and other beneficiaries.

**I**NTERIOR has suggested that new legislation may be needed to define and clarify congressional policy regarding cost allocation procedures, length of amortization period, and return of interest on federal projects. Opposition to any increase at this time has come from Congressmen and farmers in the 6-state area served by SPA, who contend that the boost in rates would impose an undesirable burden on hard-pressed farm power groups and other segments of the economy now under economic pressure.

Along this line, Senator Kerr (Democrat, Oklahoma) late last month introduced a bill (S 3338) which would bar any increase in rates for eighteen months on federal power furnished to any public body or co-operative. The bill was cosponsored by fourteen Democrats and two Republicans. SPA Administrator Douglas Wright told the joint congressional group that, if the rates went into effect, "preferred" customers would bear most of the burden because (as the result of the "preference clause" operation) very little fu-

ture SPA power will even be available for sale to private power company customers.

**A** SENATE-HOUSE compromise on authorizing legislation for the \$760,000,000 Upper Colorado river water storage and power project may be easier than was earlier predicted. Stronger congressional controls by the White House, following announcement of the President's candidacy for re-election, were credited with the unexpected strength developed for the bill in the lower house, where it passed 256 to 136. The House bill (HR 3383), which does not include the controversial Echo Park dam approved by the Senate last year in its \$1.6 billion version (S 500), appeared to meet with the favor of Senate-appointed conferees, led by Senator Anderson (Democrat, New Mexico).

The New Mexican Senator said that a conference version would be "easy to agree on." At least four dams with power features are sure to be contained in whatever measure is approved by the Senate-House conference for resubmission to both chambers. These are Glen Canyon (Arizona), Flaming Gorge (Utah), Curecanti (Colorado), and Juniper (Colorado). Combined generating capacity would be 1,137,000 kilowatts.

**B**ILLS have been introduced in both houses of Congress designed to curb the flow of natural gas across national borders. In the House early this month, Representative Bailey (Democrat, West Virginia) proposed an excise tax on imported natural gas, which he said would be similar to existing imposts on coal, oil, and petroleum products. The Bailey Bill (HR 9585) would amend the Internal Revenue Code of 1954, to impose an import tax on gas of 10 cents per Mcf.

The West Virginia Congressman said

## WASHINGTON AND THE UTILITIES

he felt the measure would be "appropriate" in view of the fact that all U. S. coal shipped to Canada is taxed at the rate of 50 cents a ton. The bill has been referred to the House Ways and Means Committee. In the Senate, Senator Watkins (Republican, Utah) has introduced as a separate bill (S 3270) the same language proposed by him in a rejected amendment to the Harris Bill (HR 6645).

### *FPC Tax Accounting May Set a Pattern*

**I**F the recent decision of FPC's chief presiding examiner, Edward B. Marsh, is allowed to stand unchanged, it is likely to be a persuasive precedent for a number of state regulatory commissions looking for guidance on the accounting treatment by utilities of the liberalized tax depreciation provisions of the 1954 Revenue Act. Marsh's opinion resulted from a petition by nine subsidiaries of the Columbia Gas System for a declaratory judgment on how to account for and report to the FPC amounts accumulated for federal income tax purposes under the 1954 liberalized depreciation provisions.

The order relates to the various alternative methods of depreciation permitted by § 167 of the Internal Revenue Code. This applies to all corporate enterprises—not just public utility companies. And it is not restricted to the companies engaged in the defense program or related programs, such as were entitled to the 5-year rapid amortization certificates of § 168, although Examiner Marsh's opinion did compare both of these Internal Revenue provisions and found the intent of Congress similar.

Section 167 gives companies the alternative of using either the straight-line method, whereby the property is depreciated at a uniform annual rate over its service

life, or a liberalized method, under which the depreciation rate would be higher during the earlier years and lower during the later years of its life.

Under the liberalized method, companies could pay lower income taxes during the early years by reason of deductions for depreciation at the accelerated rates. Thus if the utility were allowed to continue to charge current rates it could retain the difference between the amounts it would recover from the ratepayer as tax expense determined on the basis of normal straight-line depreciation and the amounts of taxes which it actually will be required to pay on the basis of liberalized depreciation.

**T**HE Columbia Gas companies did not request a determination as to the ultimate treatment of the reserve for deferred taxes for rate purposes. This would have involved a ruling as to whether they will be entitled to earn a return on the plant which may be constructed or acquired with funds derived from deferred taxes.

Presiding Examiner Marsh concluded that the FPC's Uniform System of Accounts and its Annual Report Form No. 2 should be amended to provide for accounting and reporting of the federal income taxes resulting from liberalized depreciation. He also ruled that natural gas companies which propose to use the liberalized methods should notify the FPC of their intent to do so, and should be required to maintain subsidiary accounts necessary to permit identification of the annual additions to plant and the amounts accumulated as tax reserves applicable to these additions. The decision is subject to review by the commission, either upon appeal by parties to the proceeding within twenty days or upon the FPC's own motion within ten days thereafter. If no review is initiated, the decision will become final at the end of this 30-day period.



## Wire and Wireless Communication

### *FCC Time Limit on Bell Radio Applications*

THE Federal Communications Commission has issued a statement of policy concerning the filing of applications for radio licenses on contracts for system communications where the equipment is leased from, or will be maintained by, Bell system telephone companies. The change was necessary as the result of a provision of the consent decree recently filed by the American Telephone and Telegraph Company in settlement of a Justice Department antitrust suit regarding Bell system relations with Western Electric Company.

One of the provisions of this consent decree limits the servicing of leased radio communications systems under private contract by Bell companies. Such private contract arrangements, which are already in effect, may be continued for a period of five years from the filing of the consent decree January 24, 1956. There was a further 45-day period for completing pending contract negotiations for handling such business by Bell system companies. After that, Bell system companies can only take on new radio communications business on a regulated utility basis instead of by private contract.

In an earlier notice, dated March 5th, the FCC staff apparently misconstrued the

45-day period to mean an absolute cut-off date on all further applications for radio licenses under private contract. The cut-off date noted was March 9th (when the 45-day period expired). It was subsequently decided, however, that this 45-day period extended to contracts on which negotiations had been completed by March 9th, even though applications for radio licenses had not actually been filed with the FCC by that date. A revised notice was accordingly sent out by the FCC authorizing the filing of applications with respect to Bell system contract negotiations completed within the 45-day period.

In carrying out the spirit of the consent decree limitations, the Bell system companies suspended further negotiations for new contract business on leased radio communications equipment not completed by March 9th. Over the long range it was generally believed that Bell system companies would seek to work out an arrangement whereby such radio communications services for private industries and others needing them could be conducted as regulated utility services. This would probably require the filing of tariffs in a number of states. It would also probably require a study of state and federal laws to determine procedure for changing such activities over from a private contract basis to a regulated utility operation.

## WIRE AND WIRELESS COMMUNICATION

### *Congress Checks on SAGE Program*

THE House Armed Services Committee recently called for the Air Force to justify its controversial proposed \$2.4 billion, 10-year contract with the American Telephone and Telegraph Company. The contract calls for 25,000 new telephone circuits to hook up the vast air defense warning system known as SAGE. The telephone service would cost the government \$240,000,000 a year.

The Comptroller General last year ruled that the Air Force lacked specific authority to go ahead with such a contract. The Air Force argued, however, that it could do so under general authority for public utility contracts. The question came up during a committee hearing on the Pentagon's \$1.8 billion military construction bill. Representative Paul J. Kilday (Democrat, Texas) said he wanted to know, in view of the rapid development of missiles and other new weapons, whether the SAGE system might be outmoded "in a matter of months." Chairman Carl Vinson (Democrat, Georgia) said the committee would go into the whole question, and he told the Air Force to prepare a detailed justification for presentation later.

Air Force General Counsel John Johnson said that if the government should cancel the whole project at its most expensive point in 1961, it would be liable for a maximum of \$222,000,000. This amount would have to be paid to the company for unrecoverable, nonamortized costs of the vast project. Johnson said this was highly unlikely.

THE Air Force promised to give rural telephone co-operatives a chance to participate in construction of the vast \$2.4 billion in telephone lines for SAGE. Rep-

resentative Lee Metcalf (Democrat, Montana) had complained to the House Armed Services Committee that the Pentagon was not giving the co-operatives a chance to bid on telephone lines to be constructed in their areas. Metcalf said that the AT&T and its subsidiaries were getting the jobs which he said would enable them to move in and destroy the co-operatives.

Major General Gordon A. Blake denied that was the case. He said co-operatives would have an equal chance to compete for the work. Chairman Vinson said such an assurance should be written into the pending military construction bill. He directed the Air Force to draw up a suitable amendment.

### *Southern Bell Strike Losses*

LAST year's Southern Bell Telephone & Telegraph Company strike cost both sides a total of at least \$6,950,000. The strike involved 45,000 members of the AFL-CIO Communications Workers of America and lasted for seventy-two days. This was one of the longest and largest strikes of 1955, although less than half as long as the current Westinghouse Electric Corporation strike.

The Southern Bell strike settlement called for wage hikes of \$1 to \$4 a week for 50,000 employees, an improvement for the union in the contract's grievance arbitration clause, a contract right to observe picket lines of other workers, a one-year no-strike clause, and arbitration of discharges of 237 strikers for alleged violence.

The CWA estimated that the strike cost it \$4,500,000, mostly in strike benefits to workers on the picket lines. But, in addition, the union may end up spending close to another million dollars in connection with the arbitration of cases in-

## PUBLIC UTILITIES FORTNIGHTLY

volving the discharged workers. Arbitration is still going on, even though the strike was settled last May.

The company had no estimate of its cost of the strike. It estimates spending around \$1,250,000 repairing property damaged during the strike. It also has a \$5,000,000 damage suit against the union as a result of the strike. A company official said the arbitration of discharges had cost the company around \$200,000 so far, including awards of back pay to reinstated workers.

There has been no positive estimate of the loss of wages to telephone workers during the Southern Bell strike. An Associated Press dispatch on March 4th said that company estimates indicated such wage losses might amount to \$17,500,000, whereas CWA estimates placed the loss nearer to \$30,000,000.

With an eye to the Southern Bell Case, the AFL-CIO Electrical Workers Union, involved in the current Westinghouse Electric strike, is resisting company proposals to arbitrate 100 or more firings in that strike. The Westinghouse union wants reinstatements without lengthy and costly arbitrations.

### *British Communication Report Hints at Rate Boost*

THE recently issued annual report of Cables and Wireless, the British government-owned world-wide communication system, is interesting, not so much in what it says but at what it infers. The report, which was issued for the year ending March 31, 1955, stated:

The drive to promote efficiency and economy has continued and will not be relaxed. Cumulative savings effected over the last five years are now running at the rate of approximately £250,000 per annum. This saving is substantial

but it is little more than the increase of staff costs last year. Under the inflationary conditions prevailing in so many parts of the world where the company operates, it is to be feared that running costs will go on rising and that they cannot be matched by a corresponding rise in revenue at present tariffs, despite steps taken to stimulate traffic.

In addition, as mentioned in the last report, the company is faced with the problem of financing renewals of the cable system. The company has been able to build up a reserve out of profits towards the cost of replacing its cable ships and shore installations at current prices, but has not had a large enough profit margin to do the same, as it would have liked, in respect of the cable system; and general capital reserves are insufficient for the purpose.

It is evident that, if operating costs rise further, and given the necessity to renew the cable system at current prices, the company will be unable to maintain even its present moderate profit level unless revenue can be increased.

FROM the foregoing it would appear that there is full recognition of the inadequacy of original cost accounting and that for at least part of the assets the company has been setting up current cost or economic depreciation. It obviously would have liked to have done the same for the cable system but earnings were inadequate for that purpose.

This facing up to the economic facts of life—namely, that inflation exists—is not new with the British. For a number of years, the British Telephone System, which is also government-owned, has, in addition to original cost depreciation, been setting up supplementary accruals in order that over-all amounts can replace the assets.

# Financial News and Comment

By OWEN ELY



## Financing of Natural Gas Companies

THE following analysis of natural gas utility financing is based on a talk given by Marvin Chandler, president of Northern Illinois Gas Company, delivered at the Mid-West Industrial Gas Council at Chicago on January 20th. The accompanying charts are from the same source. (See pages 465 and 467.)

The gas utility industry presents various complexities which make it difficult to analyze financing policy and practice. First, there is the rapid transition in recent years from manufactured gas to natural gas, with resulting new trends. Second, there is frequently some overlapping among the different segments of the industry, as well as with the electric utilities in the retailing division. Third, several large holding companies raise much of the funds for their subsidiaries by selling their own debentures, but figures on the latter

do not appear in the industry statistics published by the American Gas Association.

The gas utility industry as a whole has about tripled in size over the past fifteen years to its present net plant figure approximating \$10 billion. The industry spent about \$1.4 billion last year *versus* \$1.1 billion in 1954. (See upper chart on page 465.) The outlay for construction is expected to decrease gradually over the next three years—although past experience has indicated that such advance projections may prove too conservative. The anticipated decline is due principally to the fact that large new pipeline projects are now becoming smaller in number, although in other respects the industry should continue to grow rapidly. As indicated in the chart, expenditures for distribution facilities approximate \$400,000,000 a year and may continue around that level.

BASED on an average for the four years 1951-54, inclusive, the total gas utility and pipeline industry has raised the funds required for construction substantially as follows:

<i>Sale of Securities</i>	<i>Per Cent</i>	<i>Totals</i>
Bonds and Debentures (Net)	44%	
Preferred Stock	7	
Common Stock	15	66%

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# PUBLIC UTILITIES FORTNIGHTLY

## Cash Generated Internally

Depreciation, Depletion, Etc.	21%	
Retained Income .....	10	
Decrease in Misc. Items ...	3	34%
		<u>100%</u>

Thus, about two-thirds of construction funds in the past have been raised by issuance of securities. Actually, the amount of bonds sold was somewhat higher than is indicated, since new bonds must be sold to replace portions of old issues retired by mandatory sinking funds. This explains the use of the word "net" in the table. Over the 4-year period, there was a tendency toward smaller borrowing and increased common stock financing. Thus the proportion of equity financing in 1954 was 24 per cent compared with 23 per cent in 1953, 20 per cent in 1952, and 14 per cent in 1951.

**I**N future, with anticipated total expenditures declining and retained earnings and depreciation increasing, the amount of new funds required through security sales may decline rather sharply. Unless construction is larger than now forecast, the industry may need to raise through security sales only about \$600,000,000 next year, \$400,000,000 in 1957, and perhaps \$100-\$200,000,000 in 1958—as compared with an average of \$868,000,000 in 1951-54.

The charts on capital structure reproduced on page 467 reflect the substantial changes which have occurred in the industry since the prewar period. The 1954 figures are as shown in table below.

Major new pipelines financed in recent

years have usually had an initial capital setup of about 75-10-15 per cent. El Paso Natural Gas several years ago applied to the FPC for a certificate to build an extension to its line which would have been financed with 88 per cent senior securities and a common equity of only 12 per cent; however, the commission would not issue a certificate unless the debt ratio was reduced to 75 per cent and the common equity raised to at least 15 per cent, and El Paso agreed to do this.

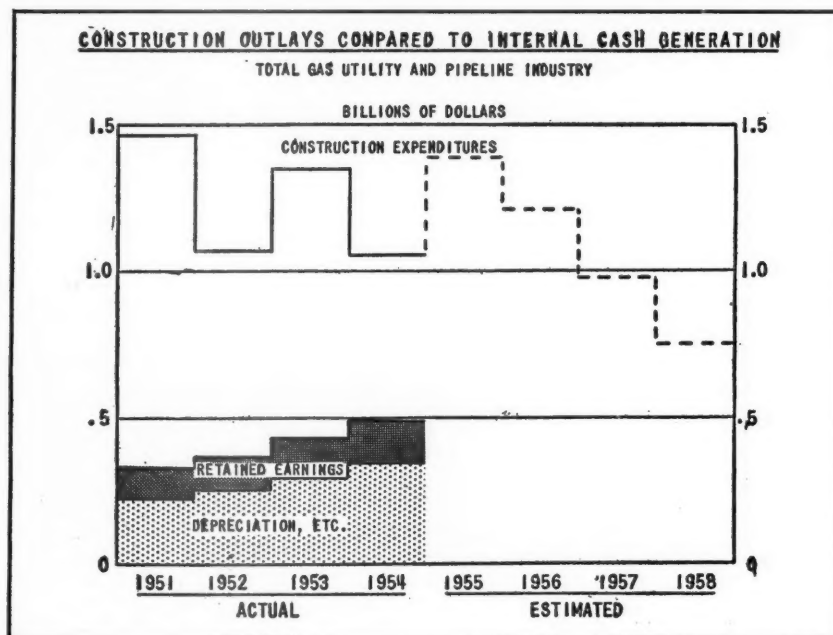
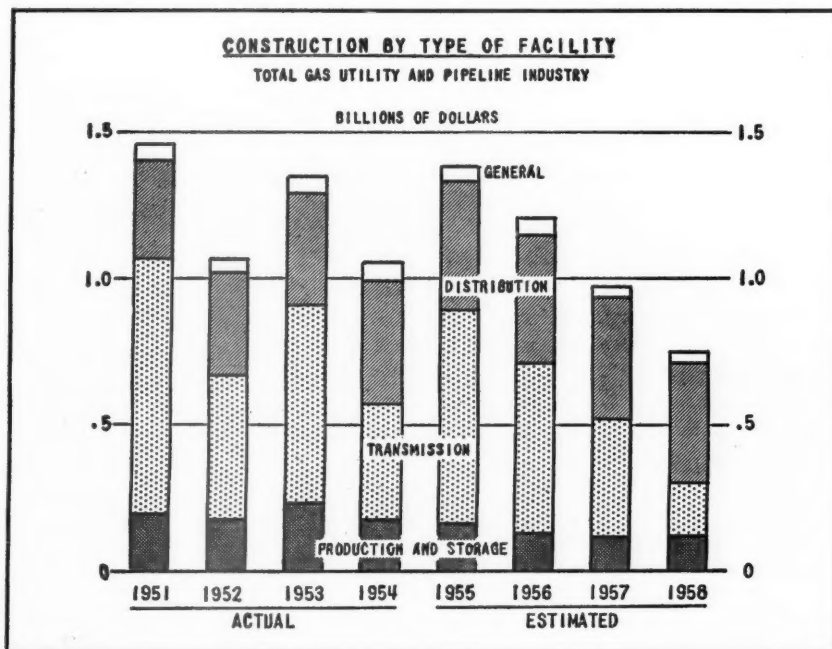
The reason why the pipeline companies have been able to go into debt so heavily is that they ordinarily have firm long-term contracts to buy gas at one end of the line (backed by proven reserves) and firm contracts to sell at the other end, backed by the sound credit standing of the distributing utilities. The depreciation charge on the pipelines usually provides more than enough cash to pay the sinking fund on the bonds, so that bondholders are in a strongly protected position. The preferred stock also usually has a sinking fund, though over a longer period of time. The common stock investor enjoys a high degree of leverage initially, but the equity ratio will gradually improve as bonds and preferred stocks are retired through sinking funds.

**T**HE gas distributors have a much more conservative capital structure on the average, with 49 per cent debt, 6 per cent preferred stock, and 45 per cent common stock equity in 1954. However, the figures would be less conservative if the holding company debts of Columbia Gas, Consoli-



	Straight Natural Gas Utilities		
	Transmission Companies	Distributing Companies	Combined Oper. Utilities
Long-term Debt .....	64%	49%	56%
Preferred Stock .....	8	6	7
Common Stock Equity ....	28	45	37
Total .....	<u>100%</u>	<u>100%</u>	<u>100%</u>

# FINANCIAL NEWS AND COMMENT



## PUBLIC UTILITIES FORTNIGHTLY

dated Natural Gas, National Fuel Gas, and others were included. So far as the operating companies alone are concerned, the average structure of 49-6-45 compares with the average electric utility setup of 51-12-37. One reason for the higher equity ratios of gas retailers as compared with the electric utilities is probably the realization that there is some uncertainty regarding future long-term gas supplies, and also that there is a more limited market, with fewer appliances, than for the electric utilities.

There is a considerable diversity of capital structure among the major gas distributing companies, ranging from a 73 per cent equity ratio for Pennsylvania Gas down to 21 per cent for Houston Natural Gas. However, only six of the 30 companies included in Mr. Chandler's tabulation of distributors had debt ratios of over 60 per cent, while only one of his 11 transmission companies had less than 60 per cent. Distributors' bond issues usually run for twenty-five or thirty years, compared with twenty (or sometimes fifteen) years for the pipelines. Since the distributing end of the business is not closely tied to the 20-year gas purchase contract, a somewhat longer life can be assigned to it; and even if natural gas is eventually no longer available, the company could probably turn back to manufactured gas. The pipeline, on the other hand, would probably have more problems without a continued supply of natural gas.

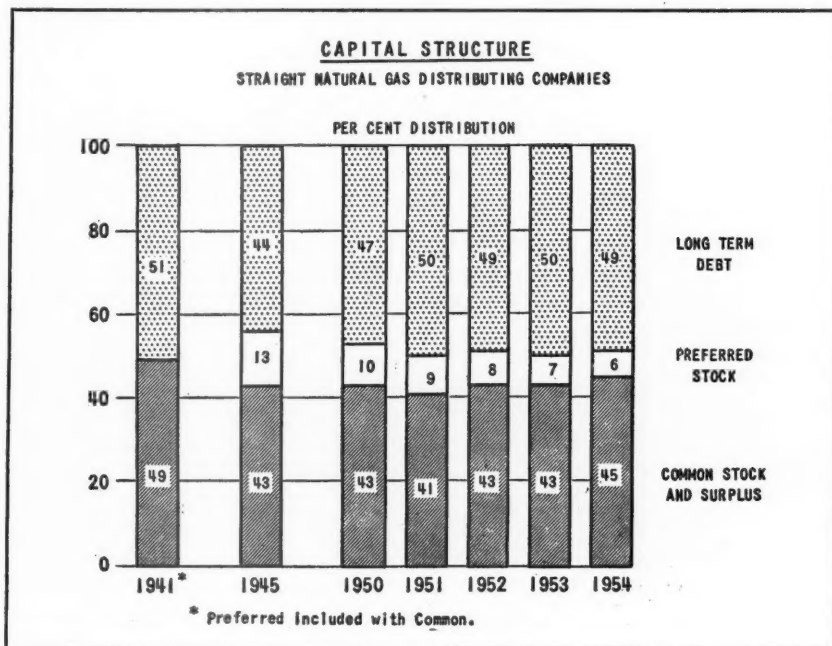
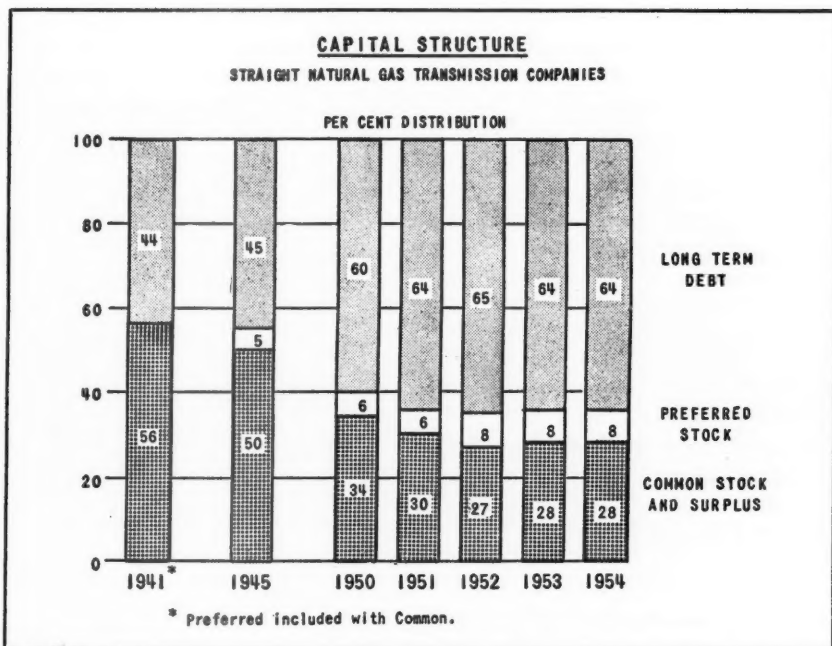
**N**EVERTHELESS, institutional buyers require some moderate protection in the case of even distributing company bonds—frequently a 2 per cent sinking fund retiring half the bonds by maturity. Usually these sinking funds require cash payments, while with electric utilities sinking-fund requirements can usually be satisfied by property additions in lieu of cash;

*i.e.*, few if any bonds are actually retired by sinking funds. Preferred stocks have not been sold in very large amounts by distributing gas companies—many of them have no preferred stocks outstanding—because many managements do not like to have to set up cash sinking funds for preferred stocks as well as bonds. However, as a practical matter, a 2 per cent sinking fund would mean only a moderate increase in new-money requirements. Mr. Chandler stated:

... My own belief is that preferred does have a place in the capital structure of a gas distributor. I believe that the debt ratio should be kept low enough so that a good credit standing will be maintained and a borrowing reserve be available at all times in case of emergency. A utility has an obligation to satisfy the demands of its customers at all times, and capital needs may coincide with an unfavorable market for the company's stock. Therefore, the debt ratio should be kept at a level where additional borrowing is possible. The common stockholders, on the other hand, may be benefited substantially by financing with a smaller proportion of common equity than remains after allowing for a prudent and sound proportion of debt. For a well-set-up gas distributor, I don't regard a common equity ratio of 40 per cent as too small at all, but I would regard a 60 per cent debt as too heavy. Preferred stock provides a means of bridging the gap between a debt ratio in the 50 per cent area or under, and a common equity ratio in the 40 per cent area. . . .

**R**ETURNING to the question of capital leverage, which applies especially to the pipeline or integrated gas utilities, it is obvious that the higher the debt ratio the greater the leverage and the higher the

## FINANCIAL NEWS AND COMMENT



## PUBLIC UTILITIES FORTNIGHTLY

return for the common stock. Thus, if a \$100,000,000 pipeline company earning 6 per cent or \$6,000,000 has a debt ratio of 50 per cent and an interest rate of  $3\frac{1}{2}$  per cent, interest charges are \$1,750,000 and the balance earned on common stock is \$4,250,000—equal to  $8\frac{1}{2}$  per cent on the \$50,000,000 equity money. On the other hand, if the same company borrows 75 per cent of its capital, paying interest of 4 per cent or \$3,000,000, there is left for the common stockholders another \$3,000,000, equal to 12 per cent on the \$25,000,000 investment. But the stockholders must realize the increased risk involved in the 75-25 setup as compared with the 50-50. The stock market, perhaps, is apt to give less attention to the risk factor than to the favorable leverage results.

**M**R. CHANDLER presented several charts tabulating various spot ratios, at December 15, 1955, which may be summarized as shown in the table below.

The transmission companies are able to earn more on book value than the distributing companies, and hence market prices are considerably higher in relation to book values. This may also be due to the fact that gas reserves in the ground have increased in value quite substantially and this has not yet been reflected in book value. This advantage may tend to compound in the case of a rapid growth company with substantial reserves, since new

common stock can be sold at a higher ratio to book value than the original stock's ratio. This in turn has a favorable effect on the market price of the old stock. Essentially the same result occurs with respect to earnings reinvested in the business. Mr. Chandler remarked:

... When the common stockholder leaves part of his earnings in surplus, enhancing the book value, and this increment to book value earns at the same rate as the rest of the common equity, it will be priced out at the same level in the market and thus produce in market value far more than the dollars retained. I am sure that this result . . . has been a strong contributing factor in the price appreciation in utility shares . . .

**R**EGARDING the issue of convertible debentures or preferred stocks, he pointed out that the major purpose is to obtain a low carrying cost until such time as the facilities being constructed with the funds become fully productive. Then with higher share earnings and a resulting higher market price, conversion into the common stock automatically begins. However, if there is no real reason to expect earnings gains, and rising prices for the common stock, "the convertible merely clutters up capital structure on a hope of a booming market and probably will render straight common financing more difficult."



	Ratios for Common Stocks of	
	13 Transmission Companies	30 Distribution Companies
Yields—Range .....	2.2%-5.8%	2.9%-5.7%
Averages .....	4.5%	4.7%
Earnings-price Ratio—Range .....	3.0%-8.5%	4.1%-8.7%
Averages .....	6.3%	6.7%
Earnings as Per Cent Return on Book Value—Range .....	10.9%-26.0%	5.4%-17.7%
Averages .....	14.9%	11.4%
Market Price as Per Cent of Book Value—Range .....	154%-370%	90%-249%
Averages .....	233%	170%

# FINANCIAL NEWS AND COMMENT

## FEBRUARY UTILITY FINANCING PRINCIPAL PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

Date	Amount	Description	Price To Public	Under- writing Spread	Offer- ing Yield	Moody Rat- ing	Indicated Success of Offering
<i>Bonds</i>							
2/15	\$10.0	Central P. & L. 1st 3½s 1986 .....	100.96	.72C	3.20%	A	d
2/16	10.0	Dallas P. & L. 1st 3½s 1986 .....	100.68	.54C	3.09	Aaa	d
2/28	7.0	Kansas G. & E. 1st 3½s 1986 .....	102.38	.46C	3.25	A	a
2/29	10.0	Southwestern P. S. 1st 3.35s 1981 .....	100.25	.70N	3.34	A	a
2/29	10.0	Texas Elec. Ser. 1st 3½s 1986 .....	101.93	.59C	3.15	Aa	d
<i>Preferred Stocks</i>							
2/15	30.0	So. Calif. Edison 4.24% Pfd. (\$25 par)	25.55	.48N	4.15		a
2/21	40.0	Tenn. Gas Trans. 4.50% Conv. Pfd.* ..	100.00	3.00N	4.50		a
2/29	3.0	Southwestern P. S. 4.40% Pfd. (\$25 par)	25.00	.50N	4.40		a
<i>Common Stock—Offered by Subscription</i>							
2/23	2.4	Southern Indiana G. & E. ....	28.50	.30N	5.61	7.87	—
2/24	.2	New Britain Gas Light .....	29.00	**	6.21	8.93	—
<i>Common Stock—Direct Offering</i>							
2/1	2.1	Atlantic City Electric .....	28.13	.79N	4.27	7.50	a
2/1	14.1	Texas Utilities .....	35.25	.87C	3.63	5.85	a
2/28	5.2	Kansas G. & E. ....	25.88	.74C	4.64	7.46	b

\*The stock is convertible into 2.85 shares of common to March 1, 1961, then into 2.65 shares of common to March 1, 1966. \*\*Not underwritten.



## RECENT FINANCIAL DATA ON GAS UTILITY STOCKS

1954 Rev. (Mill.)			3/6/56 Price About	Divi- dend Rate	Approx. Yield	— Share Earnings* —			Price- Earnings Ratio	Div. Pay- out	Approx. Common Stock Equity
		Pipelines				Cur- rent Period	% In- crease	12 Mos. Ended			
\$ 4	O	Alabama-Tenn. Nat. Gas	19	\$ .80h	4.2%	\$1.60	10%	Sept.	11.9	50%	42%
13	O	Commonwealth Nat. Gas	29	1.20	4.1	2.54	2	Sept.	11.4	47	30
14	O	East. Tenn. Nat. Gas ...	10	.60	6.0	.62	41	Dec.	16.1	97	14
44	S	Mississippi Riv. Fuel ....	32	1.40	4.4	1.87	1	Sept.	17.1	75	54
48	S	Southern Nat. Gas ....	35	1.80	5.1	2.37	32	Dec.	14.8	76	26
200	O	Tenn. Gas Trans. ....	30	1.40	4.7	1.76	35	Dec.	17.0	80	22
150	O	Texas East. Trans. ....	26	1.40	5.4	1.97	31	Dec.	13.2	71	23
68	O	Texas Gas Trans. ....	22	1.00	4.5	1.74	5	Dec.	12.6	57	27
63	O	Transcont. Gas P. L. ....	17	.90	5.3	1.09	11	Sept.	15.6	83	21
Averages					4.9%				14.4	71%	
Integrated Companies											
122	S	American Nat. Gas ....	61	\$2.20	3.6%	\$2.88	2%	Sept.	21.2	76%	39%
42	A	Ark.-Louisiana Gas ....	20	1.00	5.0	1.07	4	Dec.	18.7	93	49
30	O	Colo. Interstate Gas ....	57	1.25	2.2	3.99	87	Sept.	14.3	31	29
304	S	Columbia Gas System ...	16	.90	5.6	1.20	22	Dec.	13.3	75	44
9	O	Commonwealth Gas ....	8	(a)	4.0(a)	.55	13	Dec. '54	14.5	—	69
10	A	Consol. Gas Util. ....	12½	.75	6.0	1.07	6	Oct.	11.7	70	53
213	S	Consol. Nat. Gas ....	37	1.70	4.6	2.86	18	Dec.	12.9	59	66
144	S	El Paso Nat. Gas ....	46	2.00	4.3	2.83	46	Nov.	16.3	71	22
34	S	Equitable Gas ....	27	1.40	5.2	1.92	3	Sept.	14.1	73	31
15	O	Kansas-Nebr. Nat. Gas .	35	1.60	4.6	2.38	83	Dec.	14.7	67	32
88	S	Lone Star Gas ....	30	1.60	5.3	2.15	18	Dec.	14.0	74	39
22	S	Montana-Dakota Utils. .	26	1.00	3.8	1.36	1	Sept.	19.1	73	31
18	O	Mountain Fuel Supply ..	27	1.20	4.4	1.50	NC	Sept.	18.0	80	59
64	S	National Fuel Gas ....	21	1.00	4.8	1.56	13	Sept.	13.5	64	58
108	S	Northern Nat. Gas ....	44	2.20	5.0	3.56	29	Dec.	12.4	62	34
37	S	Oklahoma Nat. Gas ....	24	1.40	5.8	2.03	25	Dec.	11.8	69	32

# PUBLIC UTILITIES FORTNIGHTLY

87	S	Panhandle East, P. L. . .	77	3.00	3.9	4.63	NC	June	16.6	65	34
10	O	Pennsylvania Gas . . . . .	23	1.00	4.3	1.76	NC	Sept.	13.1	57	77
159	S	Peoples Gas Lt. & Coke .	157	8.00	5.1	11.40	15	Dec.	13.8	70	40
27	O	Southern Union Gas . . . .	22	1.12	5.1	1.33	39	Dec. '54	16.5	84	38
215	S	United Gas Corp. . . . .	32	1.50	4.7	2.03	D2	Dec.	15.8	74	41

Averages 4.6% 15.1 69%

## Retail Distributors

23	A	Alabama Gas . . . . .	36	\$1.28	3.6%	\$2.20	31%	Jan.	16.4	58%	44%
38	O	Atlanta Gas Light . . . . .	29	1.20	4.1	2.11	23	Sept.	13.7	57	40
5	O	Berkshire Gas . . . . .	15	.80	5.3	.97	111	June	15.5	82	37
4	O	Bridgeport Gas Light . . .	27	1.50	5.6	2.11	40	Sept.	12.8	71	45
4	O	Brockton-Taunton Gas . .	13	.70	5.4	.65	20	Dec. '54	20.0	108	44
46	S	Brooklyn Union Gas . . . .	34	1.80	5.3	2.53	—	Sept.	13.4	71	46
1	O	Cascade Nat. Gas . . . . .	10	—	—	Deficit	—	Sept.	—	—	13
29	O	Central Elec. & Gas . . . .	16	.80	5.0	1.30	18	Sept.	12.3	62	16
10	O	Central Indiana Gas . . . .	14	.80(b)	5.7	.95	34	Sept.	14.7	84	62
5	O	Chattanooga Gas . . . . .	6	.30	5.0	.35	6	Nov.	17.1	86	43
51	O	Gas Service . . . . .	24	1.36	5.7	1.84	6	Sept.	13.0	74	46
6	O	Hartford Gas . . . . .	38	2.00	5.3	2.97	NC	Feb.	12.8	67	52
2	O	Haverhill Gas . . . . .	47	2.60	5.5	3.27	9	Dec.	14.4	80	55
15	O	Houston Nat. Gas . . . . .	24	1.00	4.2	1.82	D12	July	13.2	55	23
16	O	Indiana Gas & Water . . .	18	.92	5.1	1.51	28	Jan.	11.9	61	47
6	A	Kings Co. Lighting . . . .	14	.90	6.4	1.11	D12	Sept.	12.6	81	27
40	S	Laclede Gas . . . . .	15½	.72	4.6	1.05	NC	Dec.	14.8	69	36
3	O	Michigan Gas Utils. . . . .	18	.90	5.0	1.24	23	Dec. '54	14.5	73	41
3	O	MidSouth Gas . . . . .	11	—	—	.50	—	Dec. '54	22.0	—	30
31	O	Minneapolis Gas . . . . .	25	1.30	5.2	1.59	35	Sept.	15.7	82	44
13	O	Mississippi Valley Gas . .	19	1.12(d)	5.9	1.68	15	Sept.	11.3	67	29
8	O	Mobile Gas Service . . . .	25	1.00	4.0	1.52	70	Sept.	16.4	66	31
7	O	New Haven Gas . . . . .	30	1.60	5.3	2.58	38	Dec. '54	11.6	62	64
10	O	New Jersey Nat. Gas . . .	23	1.20	5.2	1.90	19	Dec.	12.1	63	31
62	O	North, Illinois Gas . . . .	19	.80	4.2	1.11	NC	Nov.	17.1	72	49
7	O	North Penn Gas . . . . .	15	1.00	6.7	1.22(g)	NC	Mar.	12.3	82	53
183	S	Pacific Lighting . . . . .	39	2.00	5.1	2.81	30	Dec.	13.9	71	44
12	O	Pioneer Natural Gas . . . .	26	1.32	5.1	1.88	28	June	13.8	70	47
12	O	Portland Gas & Coke . . . .	35	.90	2.6	2.24	49	Dec.	15.6	40	41
2	O	Portland Gas Light . . . .	11	.75	6.8	1.22	13	Dec.	9.0	61	24
8	A	Providence Gas . . . . .	10½	.56	5.3	.52	27	Dec. '54	20.2	92	62
3	A	Rio Grande Valley Gas . .	3	.15	5.0	.26	15	Sept.	11.5	58	62
3	O	South Atlantic Gas . . . .	12	.70	5.8	.88	D5	Dec. '54	13.6	80	32
8	O	South Jersey Gas . . . . .	25	1.30	5.2	1.69	7	Dec.	14.8	77	52
23	S	United Gas Improvement	36	2.00	5.6	2.15	2	Dec.	16.7	93	63
33	S	Washington Gas Light . .	39	2.00	5.1	2.98	19	Dec.	13.1	67	42
6	O	Wash. Nat. Gas . . . . .	15	.40	2.7	.65	D11	June	—	62	60
6	O	Western Kentucky Gas . .	17	.60	3.5	1.13	5	Sept.	15.0	53	38

Averages 5.0% 14.4 71%



## RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER STOCKS

1954 Rev. (Mill.)			3/6/56 Price About	Divi- dend Rate	Approx. Yield	— Share Earnings* —			Price- Earnings Ratio	Div. Pay- out	Approx. Common Stock Equity
						Cur- rent Period	% In- crease	12 Mos. Ended			
Communications Companies											
Bell System											
\$5,297	S	Amer. T. & T. (Cons.) ..	186	\$9.00	4.8%	\$13.10**	10%	Dec.	14.2	69%	64%
220	A	Bell Tel. of Canada ....	52	2.00	3.8	2.43	5	Dec. '54	21.4	82	63
37	O	Cin. & Sub. Bell Tel. ....	89	4.50	5.1	5.16	26	Dec. '54	17.2	87	100
163	A	Mountain States T. & T. .	129	6.60	5.1	8.88	23	Dec.	14.5	74	74
285	A	New England T. & T. . .	138	8.00	5.8	8.95	14	Dec.	15.4	89	60
715	S	Pacific Tel. & Tel. ....	138	7.00	5.1	8.67	9	Dec.	15.9	81	58
81	O	So. New England Tel. ..	40	2.00	5.0	2.11	D5	Dec.	19.0	95	60
Averages					5.0%				16.8	82%	

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# FINANCIAL NEWS AND COMMENT

## Independents

—	O	Anglo-Canadian Tel. ....	31	\$ .60	1.9%	\$1.59	43%	Dec. '54	19.5	38%	—
30	O	British Columbia Tel. ...	52	2.00	3.8	2.71	20	Dec. '54	19.2	74	34%
2	O	Calif. Interstate Tel. ....	13	.70	5.4	1.04	NC	Dec.	12.5	67	34
11	O	Calif. Water & Tel. ....	19	1.00	5.3	1.34	14	July	14.2	75	36
12	O	Central Telephone ....	20	1.00	5.0	1.91	34	Sept.	10.5	52	23
2	O	Chenango & Unadilla Tel. .	22	1.20	5.5	1.31	D34	June	16.8	92	48
3	O	Commonwealth Tel. ....	16	.80	5.0	1.12	67	Dec. '54	14.3	71	35
35	O	Continental Tel. ....	34	1.20	3.5	1.79	37	Sept.	19.0	67	23
3	O	Florida Telephone ....	19	.80	4.2	1.07	40	Dec. '54	17.8	75	41
143	S	General Telephone ....	41	1.60	3.9	2.60**	24	Nov.	15.8	62	34
5	O	Inter-Mountain Tel. ....	15	.80	5.3	.92	26	Dec. '54	16.3	86	54
19	S	Peninsular Tel. ....	40	1.80	4.5	2.38	19	Dec.	16.8	76	46
16	O	Rochester Tel. ....	19	1.00	5.3	1.63	47	Sept.	11.7	61	31
3	O	Southeastern Tel. ....	17	.90	5.3	1.36	43	Sept.	12.5	66	52
7	O	Southwestern States Tel. .	19	1.12	5.9	1.37	31	Dec.	13.9	82	34
24	O	United Utilities ....	23	1.20	5.2	1.71	17	Dec.	13.5	70	33
1	O	Western Carolina Tel. ....	16	.70	4.4	1.18	17	Dec.	13.6	59	52
10	O	West Coast Telephone ..	19	1.00	5.3	1.21	13	Sept.	15.7	83	42
222	S	Western Union Tel. ....	22	1.00	4.5	2.10	39	Dec.	10.5	48	81
				Averages		4.7%			15.0	69%	

## Transit Companies

13	O	Cincinnati Transit .....	5	\$ .30	6.0%	\$ .13	D86%	Dec. '54	—	231%	41%
9	O	Dallas Transit .....	7	.35	5.0	1.10	21	Dec. '54	6.4	32	71
227	S	Greyhound Corp. ....	14	1.00	7.1	1.18	D12	Dec.	11.9	85	44
25	O	Los Angeles Transit ....	15	1.00	6.7	.99	D21	Dec. '54	15.2	99	87
29	S	Nat. City Lines ....	23	1.60	7.0	2.76	17	Dec. '54	8.3	58	75
26	S	N. Y. City Omnibus Corp. .	28	2.00	7.1	2.71E	NA	June	10.3	74	85
13	O	Niagara Frontier Transit .	9	.15	1.7	.09	D95	Dec. '54	—	167	82
73	O	Phila. Transit .....	17	.30	1.8	Deficit	—	Dec. '54	—	—	24
7	O	Rochester Transit .....	5	.40	8.0	.44	D23	Dec. '54	11.4	91	38
25	O	St. Louis P. S. ....	14	1.40	10.0	.79	D35	Dec. '54	17.7	177	90
17	S	Twin City R. T. ....	17	1.60	9.4	Deficit	—	Dec. '54	—	—	43
23	O	United Transit .....	6	—	—	.53	D28	Dec. '54	11.3	—	44
				Averages		6.3%			11.6	113%	

## Water Companies

### Holding Companies

34	S	American Water Wks. ...	91	\$ .50	5.3%	\$ .97	10%	Dec.	9.8	52%	16%
4	O	N. Y. Water Service ....	66	.80	1.2	2.10	50	Sept.	—	38	32

### Operating Companies

4	O	Bridgeport Hydraulic ...	31	\$1.60	5.2%	\$1.49	D5%	Dec. '54	20.8	107%	53%
11	O	Calif. Water Service ...	41	2.20	5.4	2.68	7	Dec.	15.3	82	29
2	O	Elizabethtown Water ...	163	5.00	3.1	6.34	D5	Dec. '54	—	79	—
8	S	Hackensack Water ....	43	2.00	4.7	3.26	D8	Dec. '54	13.2	—	40
7	O	Indianapolis Water A ...	39	.80	2.1	2.68	48	Dec. '54	14.6	30	33
5	O	Jamaica Water ....	43	1.80	4.2	2.90	—	Dec.	14.8	62	25
4	O	New Haven Water ....	59	3.00	5.1	4.42	76	Dec. '54	13.3	68	58
1	O	Ohio Water Service ....	26	1.50	5.8	2.15	21	Nov.	12.1	70	44
6	O	Phila. & Sub. Water ....	33	.50(e)	1.5	2.45	—	Dec. '54	13.5	20	22
2	O	Plainfield Union Water ..	61	3.00	4.9	4.00	8	Dec. '54	15.2	75	—
3	O	San Jose Water ....	50	2.00	4.0	3.36	16	Jan.	14.9	60	43
9	O	Scranton-Springbrook ..	17	.90	5.3	1.31	D2	Sept.	13.0	69	35
4	O	Southern Calif. Water ..	14	.80	5.7	1.04	19	Sept.	13.5	77	—
3	O	West Va. Water Serv. ...	31	1.40	4.5	1.40	—	Dec.	—	100	17
				Averages		4.4%			14.5	69%	

A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. \*Earnings are calculated on present number of shares outstanding, except as otherwise indicated. \*\*On average shares. (a)—Paid 4 per cent stock dividend. (b)—Paid 10 per cent stock dividend. (c)—Paid 5 per cent stock dividend. (d)—Paid 25 per cent stock dividend. (e)—Also paid 5 per cent stock dividend. (g)—Estimated after eliminating nonrecurring items. (h)—Paid 25 per cent stock dividend. NC—Not comparable. NA—Not available. E—Estimated.



## What Others Think

### The Urgent Need for Atom Industry Insurance

**F**ORTY-FOUR private electric companies have invested to date more than 300,000,000 "free enterprise dollars" in the planning and construction of atomic electric power plants, and attendant research. They are engaged either individually or in groups in the building of seven large and medium reactor plants and two small ones. The seventh, a large plant of perhaps 200,000-kilowatt capacity, has recently been reported.

Total generating capacity for the nine plants will be 1,112,500 kilowatts. These demonstration reactor plants are based on the principal designs thus far developed by the Atomic Energy Commission.

Ninety-five electric companies in 13 groups are actively engaged in research, planning, or study programs. AEC access permits have been issued to date to 87 electric companies.

As these facts show, and as officials of these companies have pointed out in testimony before the congressional Joint Committee on Atomic Energy, sound and impressive private industry progress towards use of nuclear energy as a power source has been made in the twenty months since the passage of the 1954 Atomic Energy Act.

But a problem of vital importance to the atomic industry remains unsolved, as

Philip Sporn, president of the American Gas & Electric Company and Nuclear Power Group, Inc., told the committee early in March of this year. It is the problem of finding ways to provide adequate insurance coverage for atomic plants. Mr. Sporn stated in his testimony that if adequate insurance is not soon made available, further efforts of private industry to go ahead with atomic power development will be seriously impeded.

**T**o show the practical bearing that insurance matters have on current atomic industry activities, Mr. Sporn conducted his discussion of them in relation to a project of the Nuclear Power Group, now in the planning stage.

He said:

All of us who are associated in this work are excited about it. . . . the principal job we are working on is the 180,000-kilowatt nuclear power plant which is known as the Dresden plant of Commonwealth Edison Company and which will be located about fifty miles southwest of Chicago.

Commonwealth will own the Dresden plant. General Electric has contracted to do the job for \$45,000,000. Francis K. McCune of that company has already

## WHAT OTHERS THINK

described to you how—because of GE's conviction that it was important to proceed with such a large-scale demonstration project at an early date—that company was willing to fix a contract price in the amount of \$45,000,000, even though its own costs would exceed that figure. Commonwealth will pay GE \$30,000,000 as its capital investment in the plant, this being approximately the amount justified by Commonwealth on a competitive power cost basis. Nuclear Power Group will pay the remaining \$15,000,000 as a research and development contribution which will enable the project to be brought into being and which will give the members of the group the kind of experience and know-how which can only come from active participation in the design, construction, and operation of a full-scale nuclear plant.

MR. SPORN explained that the work is proceeding entirely as a privately financed undertaking without any government contribution. NPG, he said, confidently expects that the reactor will be in full-scale commercial operation, supplying power to Commonwealth's consumers, in 1960. By next year, a pilot model of the reactor built by General Electric at San Jose, California, will be in actual operation producing steam to generate as much as 5,000 kilowatts of electricity in a turbine to be supplied by Pacific Gas and Electric Company, one of the members of the NPG group. Ground breaking at Dresden will take place some time this summer, according to Mr. Sporn. Originally, he said, it was estimated that the plant would commence commercial operation about December, 1960. The progress made in recent months, however, has led NPG to believe that it can beat that date by nearly six months.

Mr. Sporn further stressed that as the work has proceeded during the past year there have been a number of encouraging developments. He said:

Originally we expected that the output of the plant would be 180,000 kilowatts. More recent studies indicate the possibility that we may get a significantly better output; any increase in capacity would, of course, be an important contribution to furthering the economics of the job. The heat performance is expected to reach a figure of 11,925 Btu's per kilowatt-hour. This represents a thermal efficiency of more than 28 per cent. While this efficiency is less than can be achieved by modern conventional generation, it is nevertheless a quite respectable figure.

All in all, the work that has been done makes me confident that at Dresden we are going to learn a great deal about the art of generating steam by direct contact with an atomic reactor and that this knowledge will be of significant value. It will help us determine whether future boiling water reactors can be built on a basis competitive with conventional plants; it will also be of value in the investigation of other reactor concepts which need to be explored in discovering the best way to produce nuclear energy.

TO give the committee an idea of the economics of the Dresden plant, Mr. Sporn indicated that the estimated cost of electric energy at Dresden, treating the plant as a \$45,000,000 investment, would be approximately 10 mills per kilowatt-hour. Mr. Sporn said further that, because of the \$15,000,000 contribution which NPG is making, the cost to Commonwealth could be estimated at  $7\frac{1}{2}$  mills per kilowatt-hour, which would make the plant—on the basis of a \$30,000,000 in-

PUBLIC UTILITIES FORTNIGHTLY



"WHAT IS THERE ABOUT A DAY LIKE THIS THAT MAKES PEOPLE URGENTLY NEED AN APPLIANCE THEY HAVEN'T USED FOR SIX MONTHS, SERVICED IMMEDIATELY?"

vestment—roughly competitive with conventional plants using coal as a fuel in the Chicago area and elsewhere in the United States where fuel costs of 25 to 30 cents per million Btu prevail. He admitted that there are many places in the country where conventional fuel costs are lower than 25 to 30 cents. But "you can see," he told the committee, "that, if we succeed in the Dresden job in getting the actual cost down to 10 mills per kilowatt-hour, we will be in striking distance of achieving competitive atomic power at least in some important areas of this country."

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In short, what Mr. Sporn was trying to convey to the committee was that NPG is actively at work with Commonwealth Edison and General Electric on the Dresden demonstration plant; that the project is moving ahead at a really rapid clip; and that it would represent a significant advance in design and economics towards the day when competitive nuclear power would be at hand.

MR. SPORN then reverted his discussion to the problem of insurance. He said:

## WHAT OTHERS THINK

[Insurance] is the one remaining major hurdle which needs to be overcome before the Dresden project is in the clear so that we can confidently look forward to completing it on schedule. Bear in mind that NPG and Commonwealth are now actually spending money for the Dresden plant at the rate of three-fourths of a million dollars monthly. We are going ahead with this without any government financial assistance. This is the rate at which we must continue to spend in order to have the project in operation by the summer of 1960 as now scheduled. The question we face is how long we are justified in continuing expenditures at this rate without assurance that the problem of insurance will be solved. It is my present judgment that the Dresden project cannot proceed to final completion with the insurance issue up in the air. At some point—and the earlier the better—we need to know that the problem will be solved. Until that point is reached, we are going to have progressively more difficulty in justifying the heavy financial contributions which we are putting into the project and which, without insurance, could leave us at the date of operation with a plant that prudence might not permit us to operate.

There is much in the McKinney report [Report of the Citizens Panel on the Impact of the Peaceful Uses of Atomic Energy to the Joint Congressional Committee on Atomic Energy, released January 31, 1956] on the subject of insurance with which I heartily agree. We are going to make the Dresden reactor just as safe as it is humanly possible to do. We believe we will end up with a reactor that is so safe that the danger of a serious atomic accident will be too remote to cause any apprehension. But as the McKinney report says,

"No 100 per cent safe power reactor has as yet been conceived; 99.99 per cent safe may not be enough." And in the extremely remote, but nevertheless real, contingency of an atomic catastrophe, the number and amount of claims for resulting injuries and damage may reach very large proportions.

CONSIDERING the potential magnitude of the claims, Mr. Sporn felt that the companies concerned cannot, in justice to their owners, assume liabilities so great as to threaten their solvency. Moreover, he said, the companies believe there is a responsibility, not only as a matter of prudence, but also morally, to make sure that anyone who has a just claim for personal or property damage will have a place to go for the satisfaction of his claim.

Mr. Sporn was speaking, of course, not of ordinary insurance which is available to take care of the usual hazards in industrial operations but only of insurance or indemnification to cover third-party liability resulting from a major atomic catastrophe. This Mr. Sporn called an event that almost certainly would never occur. But if it did, he said, it could involve injury to persons and property in amounts so large that no one could—in the context of present experience—set their outside limits.

The insurance companies of the country, both stock and mutual, will have done an outstanding job if they are successful in offering the atomic industry coverage for third-party liability up to a \$50,000,000 or \$60,000,000 figure, Mr. Sporn declared. In their effort to meet the problem, he said, they have gone further than they have ever gone before in connection with third-party liability. Even so, he pointed out, it is generally believed that even this unprecedented amount of coverage may be inadequate.

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**M**R. SPORN sharply disagreed with the McKinney panel on one point. He said it was the suggestion in the report that "At least two and possibly three years remain in which to conduct research and accumulate knowledge and experience before any substantial private activity can be delayed or stopped because of inability to obtain adequate insurance." In this conclusion, he said, the panel had misgauged the situation.

He declared:

I believe the fact to be—and testimony before your committee supports that belief—that, within a very short time, nearly all nonfederal activities will be badly delayed, and some even stopped completely, unless the third-party liability problem is faced immediately.

Moreover, research and investigations during the next two or three years are not going to provide the answer to whether or not the \$50 or \$60,000,000 which may be offered by the insurance companies would be adequate or whether the possibility of a major atomic accident is so remote that it can be disregarded altogether. Only experience in the actual operation of a variety of reactors will give answers to these questions. And here we face a dilemma. We shall get that necessary experience—the factor on which all insurance is based—only by completing and operating reactors for a considerable period of years. But the atomic industry cannot complete and operate reactors without some form of assurance that the potentially very great claims resulting from a major catastrophe could be satisfied.

**T**HE McKinney report also suggested that if private interests are deterred from proceeding with reactors because of this circumstance the government should

proceed to build and operate them. But, in Mr. Sporn's view, this proposal is not a way of avoiding the insurance problem. If the government builds the plants, he said, it must face the problem of liability in the event of an atomic catastrophe, just as squarely as private groups must face it, and, in addition, it must pay the full cost of the plants.

A refusal to face up to this liability problem did not seem to the NPG head to be consistent with the purpose of the Atomic Energy Act, which is to encourage the growth of a nonfederal atomic industry—a growth which, he believed, would be largely or wholly checked by the failure to provide an adequate solution of the insurance problem. Mr. Sporn continued:

We are all agreed, I think, that it is in the interest of the public at large to get ahead as rapidly as feasible with building atomic power plants and putting atomic energy to peaceful uses. The risk of a major atomic accident is remote but, should it ever materialize, it could be so large that there is no agency except the government of the United States now capable of assuming the risk. It seems to me that, at least for an interim period during which actual experience in the operation of reactors is being obtained, this is a risk which the people of the United States as a whole, through the government, should commit themselves to cover. The people will certainly be deceived if they are led to believe that the risk can somehow be avoided by having the government build all the reactors. Our purpose should, instead, be to devise measures that will permit the atomic industry to go forward with its plants in accordance with the policy of the present law to promote the growth of such an industry.

Specifically, therefore, I urge this

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committee to consider fully, at the earliest possible date, legislation to fill the gap which now exists and to remove the last major hurdle to completion of projects like that at Dresden which, in all other respects, is moving along so impressively. The necessary legislation could take the form of excess coverage over that offered by the insurance industry, indemnification, or any other arrangement which would achieve the same end result.

**M**R. SPORN added that the private groups engaged in atomic work would be willing to pay for any coverage which the government provides over and above the third-party liability which the

insurance companies can offer on a reasonable basis. But he warned that the charge for the extraordinary third-party liability coverage is a cost factor which must be considered, in relation to the determination of the feasibility of the project.

Mr. Sporn concluded by saying that his purpose in testifying had been "to urge very strongly the necessity of legislation in some form, just as soon as possible, so that the last remaining major barrier will be eliminated" to permit NPG to go forward and complete its Dresden project. This project, he felt, would represent an important step forward along the road to the practical and economical production of nuclear power.

## Reaction to House Passage of Upper Colorado Project

**N**EWSPAPER reaction to the overwhelming victory of the Upper Colorado bill (S 3383) in the House on March 1st was surprisingly sparse. The lack of editorial comment may have been due to the fact that what had been predicted as one of the closest and roughest fights of the current session largely failed to materialize.

The House vote (256-136) was in many ways the culmination of fifty years of persistent effort on the part of the Bureau of Reclamation and many others to win acceptance for a regional water resources plan in the Colorado basin. Opposition came especially from southern California Congressmen, and might have been successful had President Eisenhower not on the day prior to the final vote strongly reaffirmed the administration's position for the bill, at the same time indicating his second-term intentions. Both undoubtedly influenced a number of Republican votes.

Speaking for the resistance, the *Los An-*

*geles Times* editorially stated as follows:

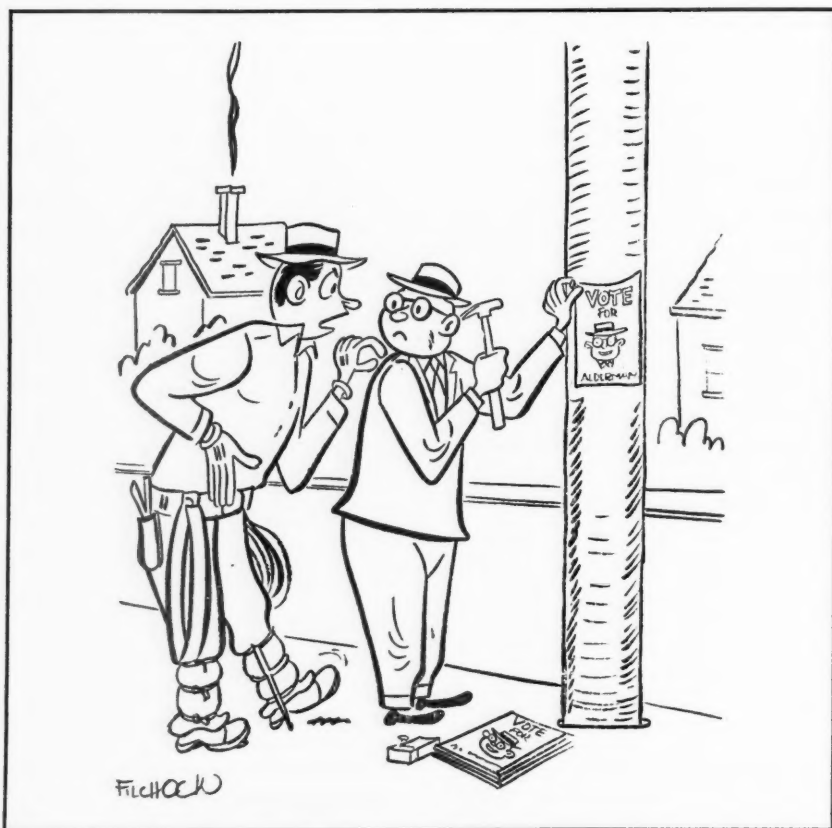
California itself, of course, has felt keenly that some phases of the Upper Colorado river project would be harmful to this state, and the Congressmen from this area have fought vigorously to protect our legitimate interests.

Distinguished engineers headed by Raymond A. Hill have reported that if the Upper Colorado river project is built the 1,212,000 acre-feet annual water supply available to the Metropolitan Water District will be cut in half. This, of course, would be a disaster.

Even beyond this, however, the California Congressmen have pointed out continually, too, the uneconomic aspects of a plan that could not stand on its own feet but must be subsidized by the American taxpayer. In this they have been joined by many eastern, midwestern, and southern Congressmen.

From every standpoint the Upper Colorado project is questionable.

# PUBLIC UTILITIES FORTNIGHTLY



"WANT TO BET?"

THE editorialist for *The Hartford Courant* remarked that the measure passed in the Senate last session had been "a dubious bill in that it covered a good deal of bait for votes." The newspaper felt that the Senate experience had shown proponents that Echo Park dam had to be dropped from their plans since it was widely seen as a threat to one of the country's natural park areas. But even without Echo Park, the newspaper was lukewarm to a large project with "questionable benefits to all the country" which would cost the nation a "pretty penny, through federal appropriations" in amounts ranging

close to a billion dollars. It added:

Certainly if these natural resources are to be developed, it will have to be a federal project. The question comes in determining the need at this time. There is virtually no element of the usual public-private power fight in this controversy, for private power companies in the Upper Colorado area have spoken for it, too. The issue comes down to whether or not the rest of the country—44 states—is willing to pay the lion's share of the bill that will be presented to develop a semiarid portion of their country. That is the question the House

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must decide, with an eye on what the long-range benefits may be.

*The New York Times*, after the vote, declared that the passage by the House of the \$760,000,000 bill to harness, store, and use the waters of the Upper Colorado makes it virtually certain that this gigantic power and irrigation project will soon be enacted into law. It stated that the major, but not the only, difference between the Senate and House bills was that "the former includes and the latter excludes the highly controversial Echo Park dam . . ."

The newspaper continued, editorially:

The measure as a whole, in both Senate and House versions, provides basically for several major works on the Upper Colorado, one of the most important of which would be the enormous Glen Canyon dam, a large power producer. This and other projects would store water precious to the region, and would provide for the initial irrigation of more than 100,000 acres of land and supplemental irrigation of over 200,000. The project marks the real beginning, for the upper basin states of Utah, New Mexico, Wyoming, and Colorado, of enjoyment of the benefits of that portion of the flow of the Colorado river allocated to them in an interstate compact of 1922. It would undoubtedly be of great economic, industrial, and agricultural advantage to the upper basin states.

**W**HETHER or not the project is worth the cost is a matter of dispute, the *Times* editorial stated. The paper had "serious reservations" regarding many features of the project, especially the economics of its irrigation and reclamation plans, but it said "there is no question but that the basic principle of comprehensive,

multipurpose development represents the proper approach of exploiting the actual and potential resources of a vast river system."

While the actual mechanics must necessarily vary with the specific problems of each region—whether it be the Tennessee, the Missouri, or the Colorado—the basic idea of integrated river valley planning seems inescapably logical, practical, and desirable, it said. It further noted that there are political hazards that this or any comparable scheme must run, including the insertion of economically doubtful projects in order to get votes. But in the view of the *Times*, this factor did not invalidate the principle that a flowing river should be tackled as a unit.

The newspaper ended its editorial on a somewhat rebellious note:

If a stream such as the Colorado is going to be developed with dams, storage reservoirs, power plants, irrigation projects, and other facilities, it has to be developed with the financial resources of the federal government. This the present administration is fully prepared to do at Glen Canyon in the Colorado basin but not at Hell's Canyon in the Columbia basin. Of course the two situations are not identical; but it would seem to us that from the point of view of long-term, regional, comprehensive planning, a high federal dam in Hell's Canyon makes just as much sense—and with greater promise of economic returns—as a high federal dam in the upper basin of the Colorado.

**T**HE *Hartford Courant* felt that the House vote had been a victory for the forces of conservation. But it said there is a serious question if the money to be spent does not represent a high cost in trying to redeem one region.

It was particularly struck by the unanimous favorable vote of the Con-

## PUBLIC UTILITIES FORTNIGHTLY

necticut delegation, which apparently it had not fully expected. The newspaper remarked:

The political undertones to the Connecticut vote were, of course, suggested by the question of flood control in New England. When New England Senators and Representatives asked for federal help in building dams and reservoirs, western legislators in the Upper Colorado area pointed significantly to the need for support on this bill. But there was more to it than that. President Eisenhower had endorsed the Upper

Colorado project as necessary to the sound and progressive development of the West.

With that significant comment, the *Courant* put aside its doubts. The measure authorized would lead to years of further planning and work before the full quota of dams and reservoirs could be constructed, it said. But the Upper Colorado area can rejoice today that the region's future is assured, the newspaper declared, and that another mighty stream is to be forced to lend a hand in irrigation and development of part of the United States.

### Business Ideal and Community Progress

THE responsibility of corporate business management to the community and to national life has often been discussed, but seldom in as searching and stimulating a fashion as in a statement made not long ago by the president of the American Telephone and Telegraph Company, Cleo F. Craig. Mr. Craig was making a speech accepting a Gold Medal of Merit awarded by the University of Pennsylvania's Wharton School Alumni Society, and excerpts from his speech may be found in the December, 1955, issue of the Pennsylvania Bell Telephone Company's *Telephone News*. The medal was awarded to Mr. Craig for his "distinguished leadership in the promotion of public understanding of business, his inspired performance in industry, and for his personal contribution to the progress of American business."

This was how the AT&T president introduced his remarks:

Today we can hear more, see more—know and understand more of the world and its people than was ever possible for human beings before. Fast and abundant communications also help us to ac-

complish more and produce more. Thus technical advance keeps opening the way to new social gains.

At the same time, however, it presents us with new risks and responsibilities. For instance, every kind and shade of opinion can find wings today. Pressure groups can raise a greater din than they ever could in the past. The average man or woman nowadays is exposed to the heaviest barrage of good and bad ideas, arguments, and solicitations that has ever been fired, and the ammunition seems inexhaustible. Freedom of communications is vital, but it can also be confusing. If we are not going to be led by the nose, we have to think, study, balance, and choose. And most important, we have got to develop the breadth of mind to do this.

In this and other ways, technical progress seems to keep asking more of us. Many people today have misgivings about the onrushing pace of science and technology. This momentum is enormous, and there's little doubt in my mind that it will change the world even faster in the years ahead.

I can't hold, however, with those who

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are alarmed at the prospect. To me the opportunities are breath-taking and worth all the effort they call for. I have real faith that we will equip ourselves to meet them. But in order to do so, I am altogether convinced that we in industry must first measure and understand what our responsibilities really are. We have to learn them, we have to accept them, and we have got to acquire the knowledge and the discipline we need to discharge them well.

**M**ORE than any civilization of the past, our modern industrial civilization relies on the free good will of men and women, Mr. Craig continued. We in this country have enjoyed the greatest degree of freedom and we have also advanced farther in industry. Mr. Craig saw no coincidence in this fact. In his view, the two go together.

But it is no coincidence either, he said, that our combination of freedom and industry has now brought this nation to a new place of responsibility in the world. If ever in the past it was necessary to argue the relation between the free and the responsible, it is no longer necessary now. We read it in the headlines every day, said the AT&T president.

What is true in international affairs can hardly be less true at home, he declared. No one can accept responsibility in the world unless he takes it first on his own doorstep. So for those in industry, Mr. Craig can see only one sure course to follow. He said it could be called common sense, policy, or something else. But to his mind, industry had to aim for, exist for, and everlastingly operate for the good of the community. The community could not ride one track and business another. The two are inseparable, interactive, and interdependent, he stressed.

Mr. Craig further commented:

I hope you don't think this is just visionary talk. I am quite aware that business is also a way of making a living. No business can succeed in serving the public well unless it succeeds financially and the people in it obtain reasonable rewards. I realize that the pulls of self-interest are very strong, and furnish valuable incentives of their own. But let me ask this question. Ought not a sincere concern for the common welfare—the desire to help build the best possible community—shouldn't that be as much the goal of a business as it is of this Wharton School which for nearly seventy-five years has been training businessmen? I surely think so. Or I'll put it another way. Should we divide our population up in some manner between those who pursue the aims of business and those who want to work for the good of society? Who would say yes to that?

Certainly we in business management are trustees for our share owners. But in the world we live in—and I don't want any other—I believe we can only be good trustees for the share owners by fulfilling our trusteeship of service to the public. To me it is not conceivable that this nation, facing the tasks which confront it today, will be content with anything less.

Furthermore, we in management have found great value in encouraging the widest possible sharing of responsibility at all levels in the organization, and this can only be brought about when people feel they have a truly satisfying motivation—the most, not the least; financial reward certainly, but not that alone. The more we learn of human behavior, the more we find that human beings really do want to devote themselves to worth-while goals. To nourish an individual's desire to grow, we in industry

## PUBLIC UTILITIES FORTNIGHTLY

must help him find goals that he feels are worthy of his best efforts.

I agree that this is more a matter of creating a climate than of furnishing a map. And I don't worry too much about this kind of business policy tending to produce a type. A person is not necessarily less of an individual because he happens to share certain qualities with others. In fact, if he doesn't share at least some of them, no one is likely to want him around. To some extent, any institution, whether it happens to be a business or a university, puts its stamp on the people in it. If the identifying mark tells of imitative thinking and mere conformity, that, of course, is not good. But if it is the broad mark of sharing in a joint endeavor, a common effort to really serve the community with the best one has to give, I don't care how many people I see wearing it. In that sort of association there ought still to be plenty of opportunity for everyone to grow individually as his talents permit.

**W**ORKINGMEN and women who are always busy with the day-to-day job have one big problem, according to Mr. Craig. The problem is how to do the most, to decide what activities will most reasonably help us, to become bigger people, with better understanding of social and public affairs—men and women broader in outlook, and thereby better able to see the ultimate as well as the more immediate effects of the decisions we are called on to make.

As one answer to this, Mr. Craig suggested that everyone who shares the re-

sponsibilities of industry would gain at least something worth while from the deliberate effort to study the relation between his own work, the work of others, the activities of government, and the well-being of the community; to do this objectively and in so far as possible through participation in a group.

We used to hear the word "isolationism" applied to a large body of thinking in the United States, he said. We do not hear it much any more, for the simple reason that it is no longer possible for us to isolate ourselves from world affairs. No business can be isolationist any more either, in the speaker's opinion. What other industries are doing affects us, he said, what we do affects them, and government affects us all. Mr. Craig maintained that we have no choice but to learn and try to understand other points of view, to study public opinion and do our best to contribute intelligently to it

**Y**EARs ago, the speaker said, he had read with great interest a book on constructive citizenship by L. P. Jacks, then principal of Manchester College, Oxford. On rereading it, he said he found these words:

Society advances by extending the area of responsibility of its members. Progress means that you are extending the sense of responsibility to those who lacked it before and are deepening it in those who have it already.

It seemed to Mr. Craig that this idea offers much to everyone today, and he quoted it "as a sort of concluding text" for everything he had said.

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## Electric Companies Make Survey of Commuting Patterns

**A** STUDY of commuting patterns of industrial workers in a number of

West Virginia cities and towns has just been completed under joint sponsorship

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by the bureau of business research of West Virginia University and the electric utility companies of the state, acting through their regional organization, the Public Utilities Association of the Virginias.

Dr. James H. Thompson, associate professor of economics at WVU, said the study was initiated about two years ago at the suggestion of area development representatives of the electric companies. The purpose was to provide information on the actual size of the area from which a new industrial plant may draw its workers. Chambers of commerce and other local new-industry promotion groups in West Virginia, as well as the utility area development people, had often been confronted with the problem of defining a practical commuting distance for industrial workers when small-town and rural plant sites were being considered as plant locations by manufacturers.

A new industry locating in West Virginia can expect to draw about 85 per cent of its working force from an area ranging up to 30 miles from its plant, according to a report of the study titled "Labor Market Areas for Manufacturing Plants in West

Virginia." Thompson said more than 5,000 employees at 24 manufacturing plants in the state were surveyed during his study. Nine plants were at Huntington, six at Morgantown, and four at Martinsburg. The remainder were in rural locations.

THOMPSON found that commuting distances are considerably larger in the small-town or rural factories. The average commuting distances at two rurally located chemical plants in the Ohio valley were 16 and 18 miles, compared with an average of five miles for all 24 firms studied.

Members of the PUAV Area Development Committee, which worked with Dr. Thompson in developing the study, are: H. D. Stillman and D. M. Miller, of Appalachian Electric Power Company; W. C. Handlan and G. W. Buzzerd, of Monongahela Power Company; B. G. Atwood, of Potomac Edison Company; J. R. Perrow and R. N. Fricke, of Virginia Electric & Power Company; and G. F. Morgan and W. J. Stewart, of Wheeling Electric Company.

## Notes on Recent Publications

Few areas of regulation have grown so rapidly—or become so all pervasive—as the law of zoning. Within a span of less than forty years, the tremendous development of our complex industrial society has brought with it a growing maze of zoning statutes, ordinances, interpretations, definitions, and procedures. There are today few individuals, businesses, industries, or communities which have not been faced, on more than one occasion, with a need for more accurate and comprehensive information on a specific matter of zoning than has been readily available in one central source.

The recent appearance of a three-volume guide to zoning, compiled by an expert in the field, manifestly helps to fill the gap

noted by all such seekers of zoning information. This is a complete revision of an earlier work, first issued in 1930 and out of print since the war years. In recognition of the widespread public demand for guidance, the new study is written for the layman as well as the lawyer, but should prove of value to both. Though questions raised by zoning are varied, complicated, and confusing, the reader of Metzenbaum on zoning should, at the very least, find these volumes an important aid in deciding what to do in any zoning situation.

Copies of the "*Law of Zoning*," by James Metzenbaum, a member of the Ohio bar, may be ordered from Baker, Voorhis & Co., Inc. 25 Broad street, New York 4, New York. Price, three volumes, \$49.50.



## AGA-Practising Law Institute Symposium

A NATURAL gas symposium on the general theme "Where Does the Natural Gas Industry Go from Here?" has been scheduled in New York at the Waldorf-Astoria hotel for April 9th to 11th, under the joint auspices of the American Gas Association and the Practising Law Institute. Similar to the successful gas law symposium two years ago, the purpose of these sessions is to give practicing attorneys and other specialists an expert review of practical legal problems affecting the natural gas business.

This year's sessions will be of special interest because of their coverage of complex questions growing out of the FPC jurisdiction over natural gas producers and the failure of the Harris-Fulbright amendment to the Natural Gas Act caused by President Eisenhower's veto.

The programmed chairman for the first day will be William A. Dougherty of the New York law firm of Dougherty and White. FPC General Counsel Willard Gatchell and John F. Jones were slated to review problems of regulating gas producers. FPC Chairman Kuykendall was also invited to address a luncheon meeting, as well as join the morning panel discussion.

MARCH 29, 1956

## The March of Events

During the afternoon, problems of pipeline and distributors' interests were to be discussed. James O'Malley, Jr., was expected to give the viewpoint of the distributors.

On the second day (April 10th) the former FPC chairman, Nelson Lee Smith, was scheduled to preside over a session devoted to the technique of rate case presentation: George D. Horning, Jr. (from the producer's standpoint), James L. White from the standpoint of pipeline interests, and another lecture from the standpoint of distributor interest.

During the afternoon meeting, Clarence H. Ross will preside. Randall J. LeBoeuf, Jr., was scheduled to discuss problems which must be considered in any additional Natural Gas Act legislation. David T. Searls will analyze the Harris-Fulbright Bill from the viewpoint of producer interest, and Leon M. Payne the problems of pipeline interests.

On the third day (April 11th) special problems of distributing companies will be covered. The symposium will end with a luncheon meeting, to be addressed by Francis X. Welch, editor, *PUBLIC UTILITIES FORTNIGHTLY*.

Further details as to registration, reservations, and cost may be obtained from the Practising Law Institute, 20 Vesey street, New York 7, New York.

## THE MARCH OF EVENTS

### Idaho

#### Seek to Nullify Natural Gas Franchise

**T**HREE Coeur d'Alene residents filed suit in district court there recently in an effort to nullify a franchise for a natural gas utility. The plaintiffs in the suit are reported to be interested in organizing a firm to bid for the franchise. They contend the city council acted illegally in granting a 50-year franchise to Kootenai

Natural Gas Company before a certificate of public necessity had been granted from the state public utilities commission.

The complaint contends that the Idaho corporation did not intend to operate but had sold out its interests to the Spokane Gas & Fuel Company, a Washington corporation. Recent supreme court decisions were cited as favoring locally owned utilities.

### Kentucky

#### Bill Permits Utility Operation

**T**HE state house of representatives on March 8th gave final legislative approval to a bill to enable Frankfort to continue operation of its municipal electric-water plant systems when it becomes a second-class city.

The vote was 71-0. As a third-class city, Frankfort is empowered to have the combined operations. This is denied a second-class city. Under an act of the regular 1956 legislative session, Frankfort will become a second-class city on May 18th. The bill that was passed consisted only of one section of the original bill, which would have set up a new form of municipal organization for second-class cities. The senate vote was 32 to 0.

Frankfort purchased its electric and water facilities from Associated Gas & Electric Company in 1943. The properties had previously been held by the Kentucky-Tennessee Light & Power Company, a subsidiary of AG&E. The city operated the utilities under an ordinance until 1946, when the legislature wrote the city ordinance into state law.

#### Commission Report

**T**HE state public service commission's biennial report, released early this

month, said the problem of financing new construction for Kentucky's utility companies has taxed the "resources of both the commission and the utilities."

The report covers the period from July, 1953, to June 30, 1955. The report said the regulated utility companies of the state "have been faced with the . . . necessity of improving and extending their facilities. In many cases, technological improvements and operating economies . . . have offset increased operating expenses. Where these have not been sufficient, it has been necessary for the utilities to request rate adjustments."

It said the private electric companies under the jurisdiction of the commission have "managed to maintain substantially the same schedule of rates for their service during the biennium."

Citing figures from the rural electric co-operatives, the report stated that by June 30, 1953, 87.1 per cent of all Kentucky's farms were electrified, an increase of 20.8 per cent over April 1, 1950.

#### Commission Reorganized

**G**OVERNOR Chandler recently reorganized the state public service commission along the lines of a bill passed by the

## PUBLIC UTILITIES FORTNIGHTLY

regular session of the state legislature last month. He reappointed Commission Chairman James F. Gordon, Democrat, and former Governor Simeon S. Willis, Republican, who had been Chandler-appointed members of the old commission.

He appointed Leo King, Democrat, to the third place on the commission. King replaces H. Clay Kauffman, Democrat,

who had been a member of the body since 1949.

The chairman will receive a salary of \$10,000 a year, and the other two members will receive annual salaries of \$7,500 each. Previously, the salaries were \$5,000.

The new commission setup specifically allows members to devote less than full time to their duties.

## Maryland

### Governor Seizes Transit Company

**G**OVERNOR Theodore R. McKeldin on March 5th seized the Baltimore Transit Company, outlawing a 36-day-old strike. The governor acted after one "final talk" with union and management under a law unprecedented in Maryland passed by the general assembly on February 29th.

The law permits the state to seize a public utility whenever it is strike-bound or a strike is imminent. Advocated by the governor as a means of dealing with Baltimore's protracted transit strike, the measure provides in part as follows:

1. The state commissioner of labor and industry would investigate a labor dispute and if he believed an emergency existed he would so inform the governor.

2. The governor would also conduct an

investigation and, if he determined there was an emergency, would proclaim that the utility involved is seized by the state.

3. Employees of the utility, in effect, would then become employees of the state. They would not be compelled to return to work, but if they did not their jobs would fall open.

4. If both disputing parties request it, a 15-day period of mediation would start, with the proviso that the mediation period not exceed sixty days.

5. In the event an agreement could not be reached, binding arbitration would set in, with each side selecting one arbitrator and the two arbitrators selecting a third. If they cannot agree a panel of arbitrators would be provided from the American Arbitration Association and would be selected from the panel.

6. There would be no court review of an arbitration decision.

## Missouri

### Denied Rate Rehearings

**T**HE state public service commission early this month rejected a motion filed by St. Louis Public Service Company for a rehearing of its request for increased transit fares. The commission granted increases equivalent to about \$450,000 in additional revenue annually. The company had asked for boosts to about \$995,000

more in revenue to offset an estimated \$1,000,000 rise in labor costs due to recent wage increases.

The company filed a new rate schedule placing the new fares in effect on March 4th, but said even with the increases approved by the commission, the company's earnings in 1956 would be less than 4 per cent on its investment.

## THE MARCH OF EVENTS

### Nebraska

#### Rural Power Units Reunite

**T**HE state's rural public power districts were reunited into one organization recently at the annual meeting of the Nebraska Rural Electric Association in Lincoln. A new set of bylaws was agreed upon by the NREA and a majority of the members of the Nebraska Rural Power Association. The NRPA was made up of 14 of the 16 rural districts which withdrew from the NREA over the statewide controversy of who should build additional power plants in Nebraska.

Generally, the districts which withdrew favored the Nebraska Public Power System to build a new plant. The districts remaining in NREA favored construction

by Consumers Public Power District.

There were said to be indications, however, that many of the basic differences among the rural districts have not been resolved in spite of the reunification.

The revised bylaws stipulate that John Clema, executive manager of the NREA, will continue as manager only until Congress acts on a request for funds to build a heavy transmission line from South Dakota to Grand Island. When that is resolved, Clema is to resign.

They also provide that the association's power supply committee will be made up of one representative from each of the 27 rural districts which buy power from the Nebraska Public Power System and are members of the NREA.

### New Jersey

#### Utility Tax Studied

**A** PROPOSAL to place a tax of as much as 3 per cent on public utility bills—telephone, electric, gas, water, sewage, and even coal and other fuels—was discussed recently among Governor Meyner and leaders of both parties in the state legislature.

The governor said each one per cent of

the proposed utility tax would yield about \$5,000,000. He estimated the need for new school revenues at \$18,000,000. It was possible, he said, a combination of the utility tax and some other impost would be utilized to raise the money.

The New Jersey Federation of Labor and the state CIO Council attacked the proposal.

### Pennsylvania

#### Higher Telephone Rates Allowed

**P**ENNSYLVANIA's public utility commission recently authorized an estimated \$230,000 annual rate increase on a graduated basis by the Pennsylvania Community Telephone Company, starting March 2nd. The boost will affect 14,376 subscribers in six eastern Pennsylvania counties by the end of 1957.

The company originally proposed to raise all rates March 1st throughout its

service area in Chester, Dauphin, Lancaster, Northampton, Monroe, and Schuylkill counties. However, it decided to defer the boosts in eight of its 17 exchanges until they are converted from lower-grade magneto to modern dial operation.

#### Sales Tax Goes into Effect

**A** 3 per cent sales tax, affecting nearly everything except food and clothing,

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went into effect in Pennsylvania recently. The state has been without a sales tax since a one per cent levy expired last summer. Income from the tax is expected to be \$322,000,000 during the current biennium.

The tax will apply to 17 general cate-

gories, including natural gas, fuel oil, and steam heat. Items exempted include telephone, telegraph, and electricity bills.

Governor Leader signed the tax bill "reluctantly," he said, because the commonwealth was "on the verge of financial disaster."

## Tennessee

### Bond Requirements Estimated

**A**CTUAL cost of the proposed new 750,000-kilowatt Memphis municipal power plant, to be located on McKellar Lake at a site in Ensley Bottoms, has been estimated at \$127,688,000, with an overall outlay of \$135,000,000 or more to be financed through revenue bonds.

Because of the anticipated growth of Memphis and Shelby county, the plant's capacity probably will be increased to 1,000,000 kilowatts by 1959 and must be

planned for an ultimate capacity of 1,500,000 kilowatts.

Anticipated expansion in power demands of the area will necessitate the start of another new plant—possibly on the south side of the Loosahatchie river near the International Harvester Company plant—about 1960, to be in operation some time in 1962.

These predictions and recommendations were made by the engineering firm of Burns & Roe, Inc., in a report made public early this month.

## Virginia

### Requests Atomic Training for Employee

**T**HE Virginia Electric & Power Company recently asked the Atomic Energy Commission to permit one of the utility's employees to enter nuclear training, it was reported recently. It was also announced that the AEC had granted se-

curity clearance to twelve Vepco employees so they can study confidential information on atomic development.

In addition, it was said, access to classified atomic data has been approved for top management so that management can study and act on information acquired by technically trained personnel.

## Washington

### Project Work to Continue

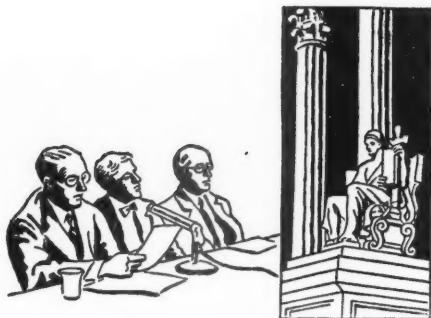
**A**COURT order signed on March 6th permits limited work to continue at least until July 1st on the city of Tacoma's \$138,000,000 Cowlitz river hydroelectric project.

The order by Superior Judge Charles T. Wright said the city is proceeding illegally since the judge has held construc-

tion of the dams at Mossyrock and Mayfield would interfere with navigation on the river in violation of a 1909 state law.

Judge Wright agreed to an order directing the city not to expend any more taxpayers' money on the project, but specified his order would not become effective until July 1st.

Meantime, the city was said to be planning an appeal to the state supreme court.



## Progress of Regulation

### *Trends and Topics*

#### Filing Tariff to Change Contract Rate

FEDERAL and state regulatory bodies, according to a long line of decisions, have authority to change public utility rates fixed by contract. There has, however, been a diversity of opinion as to how they may be changed. A commission, after investigation and proper findings, may decide that contract rates should be altered. But the question remains whether contracts have such a status under the statutes that rates may be changed by filing new schedules or tariffs with a commission. The answer seems to depend upon the wording of the regulatory statute and the question whether it recognizes rate contracts or declares invalid all rates varying from those contained in filed tariffs.

##### *Filing with Federal Power Commission Ineffective*

Two recent decisions by the United States Supreme Court on February 27, 1956, settle the question so far as the Natural Gas Act and the Federal Power Act govern rate regulation by the Federal Power Commission. In the first case, the court upheld a lower court reversal (6 PUR3d 282) of a Federal Power Commission order permitting a natural gas pipeline rate increase to become effective, notwithstanding the existence of a contract between United Gas Pipe Line Company and Mobile Gas Service Corporation. The Supreme Court laid down the rule that a regulated company supplying gas to a distributing company under a long-term contract may not, without the consent of the distributing company, increase the rate specified in the contract by filing a new rate schedule. Moreover, the commission has authority to reject such an unauthorized filing, and its failure to do so and its issuance of an order "permitting" the new rates to become effective was held to be in error.

The Supreme Court followed the same rule in the second case. The court held that the filing of an increased rate under the Federal Power Act and approval of the new rate by the Federal Power Commission were not effective to supersede a rate fixed under a long-term contract between Pacific Gas and Electric Company and Sierra Pacific Power Company. Pacific Gas had been sup-

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plying electricity to Sierra for distribution. Here again the contract specifying the rate had been duly filed with the commission and Pacific had filed a schedule purporting to increase the rate. The commission accepted the filing (7 PUR3d 256). The United States court of appeals reversed the commission order (8 PUR3d 279).

A further question, however, was raised in this case which was not raised in the natural gas case. The commission has power to prescribe a change after determining contract rates to be unlawful. It had been contended that the commission in substance found that the existing contract rate was unreasonable, and that the proposed rate was reasonable. The court said that even accepting this statement as a finding of unreasonableness of the contract rate, the commission's conclusion appeared to be based on an erroneous standard. The commission had held that the contract was unreasonable solely because it yielded less than a fair return. But while it might be that the commission might normally impose upon a public utility a rate which would produce less than a fair return, it did not follow that the public utility might not itself agree by contract to a lower rate, and in such circumstances the sole concern of the commission would seem to be whether the rate was so low as to adversely affect the public interest.

### *Contrast in Interstate Commerce Act*

The Natural Gas Act and the Federal Power Act require companies to file all rates and contracts with the commission and authorize the commission to modify any rate or contract which it determines to be unjust, unreasonable, unduly discriminatory, or preferential. The court, in the United Gas Case, said that the law evinces no purpose to abrogate rate contracts as such. To the contrary, by requiring them to be filed with the commission, the Natural Gas Act expressly recognizes that rates to particular customers may be set by individual contracts. In this respect, the court pointed out, the act is in marked contrast to the Interstate Commerce Act, which, in effect, precludes private rate agreements by its requirement that rates to all shippers be uniform, a requirement which makes unnecessary any provision for filing contracts. The vast number of retail transactions of railroads make policing of individual transactions administratively impossible. Effective regulation can be accomplished only by requiring compliance with a schedule of rates applicable to all shippers. On the other hand, only a relatively few wholesale transactions are regulated by the Natural Gas Act, and these typically require substantial investment in capacity and facilities for the service of a particular distributor.

### *Earlier Supreme Court Decisions*

The fact that the interpretation of statutes is usually controlling is indicated in two earlier cases. The Supreme Court in one case decided that rates fixed by contract could not be changed merely by filing changed rates with the consent of the Kansas commission, since such consent did not involve a hearing and decision as provided by Kansas law (PUR1923B 300). In another case, after an electric company had contracted to serve a customer at

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stated rates, the Missouri commission disapproved higher rates filed pursuant to state law but decided that rates higher than the contract rates would be reasonable. The company filed such higher rates. The case finally reached the United States Supreme Court, which held that no constitutional rights of the customer were violated (17 PUR NS 113). The contention had been made that the state court had improperly construed the statute to permit rates higher than those in the contract when a schedule was filed and the commission promulgated the schedule. The Supreme Court upheld the power of a state to annul or supersede rates fixed by contract. The customer had a chance to contest the higher rates before the commission. It failed to do so, although other customers did. As pointed out in the United Gas decision, that involved a state law as interpreted by a state court.

### *Other Views on Effect of Filing*

Other cases in which it has been ruled that contract rates could not be changed by merely filing tariffs include the Attleboro Steam & Electric Company Case decided by a federal district court (PUR1925A 268), a decision by the Idaho supreme court (9 PUR NS 505), a commission decision in Utah (PUR1927E 675), a Maine judicial decision (PUR1920C 347), and a Vermont judicial decision (PUR1921B 4). The Vermont court said that the commission must fix and change rates in case of disagreement between the parties.

Filed rate schedules have, however, been held to supersede rates fixed by contract in Arkansas (PUR1921E 674), Missouri (21 PUR NS 77), Montana (PUR1918F 768), Ohio (PUR1919A 496), Pennsylvania (PUR1920F 810; 44 PUR NS 127), and Washington (PUR1921C 225). The Pennsylvania superior court has said that after rates are filed and become effective, they apply to all customers regardless of contracts (PUR1933B 141).

A New York court held that a discriminatory contract, although valid when made, became ineffective by the terms of the Public Service Commission Law, and the filing of new schedules established the legal rate (PUR1916F 540). The New York court of appeals once held that a city could not enjoy an increase above franchise rates before the commission had determined the rates to be unreasonable, in view of a statutory provision that new schedules should become effective on thirty days' notice (PUR1921E 713). A similar ruling was made in another case (PUR1922C 74).

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## *Review of Current Cases*

### Tennessee Commission Dubs Prudent Investment Most Equitable Measure of Value

**I**N passing upon the propriety of a rate increase for Southern Bell Telephone & Telegraph Company, the Tennessee commission stated that it had found so-

called fair values, reproduction costs new less depreciation, historical cost values, and values other than prudent net original cost unsatisfactory for rate making, since

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they tended to penalize either the ratepayer or utility investor.

The commission adopted a net average investment rate base, excluding telephone plant under construction, materials and supplies, and cash working capital. The company had recommended a fair value base about 27 per cent higher than the one adopted by the commission. The commission, however, found that the proposed rate base would be inequitable and would have a serious effect on the ratepayer.

The commission detailed the reasons why it had cast aside all other measures of value but prudent investment. Historically speaking, the commission said, during periods of depression, reproduction cost new less depreciation has been advantageous to the ratepayer, while actual investment at original cost less depreciation has been more favorable to the utility. On the other hand, during periods of inflation the reverse was true; the ratepayer was desirous of original cost prudently invested less depreciation as a proper rate base, while the utility, as in the instant case, desired reproduction cost new less depreciation, or an intermediate value, like "fair value."

The rate base, said the commission, should be the one factor capable of determination at any given time without being subject to opinions, investigations, and judgment figures based upon the replacement of old, obsolete, antiquated, or even new plant with technologically improved equipment.

### *End Result Doctrine Approved*

The rate of return to be applied to a rate base, said the commission, should be determined by considering cost of equity capital, cost of debt capital, and the proper ratios in the capital structure. The commission, when it establishes a return, is by

necessity required to exercise an informed judgment and is not to be bound by any method, standard, formula, or combination of formulas.

The commission announced that it looked to the total effect or end result doctrine. If the total effect or end result is just and reasonable, then the method by which the conclusion is reached, based upon the law and facts, is secondary. Such an approach relieved the commission of adopting a mathematical formula containing numerous variable factors.

The commission pointed out that a rate of return could conceivably be varied as much as from 4 to 8 per cent by adjusting computations while still allowing the company the same net income. Such a result could be attained by disallowing items such as cost of service, adopting different rate bases, and reconstructing debt ratio or other adjustments. The end result doctrine thus discounted the means as primary, and looked toward the ends.

### *Cost of Capital as Return Factor*

Cost of capital, the commission pointed out, did not involve the question alone of whether it should be considered as rate of return, but rather involved the weight to be accorded it. Various components were discussed in seeking to establish the cost of equity capital.

At the outset, the commission clarified the financial concepts involved. "Price-earnings ratio," explained the commission, is a term used to indicate the relationship between the market price of a share of stock and the annual earnings per share. The term "earnings-price ratio" refers to annual earnings divided by the market price of stock. The relationship between earnings and dividends is the "pay-out ratio"; the balance of the earnings being retained in the business is "surplus." The "yield" of a stock is the market price of

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the stock divided into the annual dividend, which is also the "dividend-price ratio."

The commission commented that it could not accept as conclusive a factor like earnings-price ratio but rather would consider it as a part of the over-all picture. This was so because changes in market prices result from conditions over which neither the commission nor the utility has any control, such as the President's health, wars between foreign countries, or depressed business conditions.

The cost of debt capital, said the commission, could be more exactly determined than the cost of equity capital. The historical cost of present debt capital is an exact figure, and the cost of financing long-term debt for the future is a matter which can be, within reasonable bounds, ascertained.

The commission reconstructed the capital structure of the company and adopted a 45 per cent debt ratio. Under such debt ratio, additional financing for long-term

debt would amount to 3.25 per cent to 3.33 per cent of the investment, the commission found.

The commission further found that common stock, if issued to the public under average market conditions, would require an earnings ratio of between 7.60 and 7.80 per cent. A conservative pay-out ratio for such stock would be between 75 and 80 per cent. Thus, disregarding the fact that Southern Bell was not an independent utility in so far as going into the market directly to secure capital, to attract capital, an over-all return of from 5.7 to 5.8 per cent was required. The commission, however, concluded that a return of 6.1 per cent on the net investment rate base was reasonable. Such a return was held to be within the upper strata of the zone of reasonableness, in order to compensate the company for attrition and for wage increases. *Re Southern Bell Teleph. & Teleg. Co. Docket No. U-3595, January 26, 1956.*



## New York Statute Requires Consideration of Reproduction Cost in Telephone Rate Case

THE New York court of appeals upheld the decision of the appellate division (8 PUR3d 229) that under the statutes relating to regulation of telephone companies reproduction cost must be considered by the commission in determining the rate base. The decision of the United States Supreme Court in the Hope Natural Gas Company Case (51 PUR NS 193) determined that the Constitution did not mandate consideration of reproduction cost or any other specific factor in fixing rates, provided the end result would be just and reasonable. The state court said that with the constitutional barrier thus removed rate making in New York state remained none the less subject to the statutory mandate.

Section 97 of the Public Service Commission Law, which is the governing statute in telephone rate proceedings, provides that the commission shall give due regard to the return upon "value." Statutes relating to other types of utilities differ in language but the court said that, as explained by the lower court, there was no mere accident of language in the various statutes. There could be no doubt that the legislature intended the difference.

The commission, according to the court, is required to receive proof of reproduction cost less depreciation as some evidence of present value in the case of utility property. This, however, is not to say that the rates must be "based" upon reproduction cost less depreciation. The commis-

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sion is under no statutory or other obligation to confine itself to consideration of any particular one of the various alternative rate bases. The commission must determine just and reasonable rates with "due regard," among other things, to a reasonable average return upon the value of the property actually used in the public service. Due regard to one factor requires consideration of that factor but it is by no means controlling.

Although it was urged that the language of the statute represented the survival of a theory of rate making which is "unsound and outmoded," it was noted that the element of reproduction cost was introduced for the protection of the public as a means of avoiding rates based upon an excessive and unreasonable capital structure, and it might also serve as a potential safeguard for the public in times

of recession. Nor was it without some significance that, after much debate, the 1938 Constitutional Convention recommended, and the people of the state subsequently approved, a provision guaranteeing to municipally owned utilities a "fair return" on the value of property used and useful in public utility service.

In any event, said the court, if the advocates for a prudent investment or any other theory were correct and it was time for a change, that decision was not for the court to make. The function of the judiciary is not to choose between different theories of rate making on the sole basis of their alleged merits. Arguments concerning such matters should properly be addressed to the legislature. *New York Teleph. Co. v. New York Pub. Service Commission et al. No. 297, February 17, 1956.*



### Court Refuses to Set Aside ICC Orders Denying Suspension of Rates

**A**FEDERAL district court refused the request of several carriers to set aside Interstate Commerce Commission orders which, in effect, denied an investigation and suspension of rate schedules filed by a freight association.

The court pointed out that it is discretionary with the commission whether or not to suspend proposed rates, and its refusal to suspend is not reviewable by a court. The question of the commission's exclusive power over rate schedules, which was raised in this proceeding, required debate.

The relief requested called for an

extraordinary equitable remedy. Under such circumstances, said the court, a preliminary injunction will not issue to set aside the commission's orders.

The court indicated that in order for relief, such as that sought in this action, to be granted, adequate facts not seriously in dispute must be alleged, and it must also be shown that the moving party will probably prevail upon final hearing. But any doubt as to the right to relief or the power of the court to act will be resolved against the moving party. *Acme Fast Freight, Inc. v. United States, 135 F Supp 823.*



### FPC Disclaims Jurisdiction in Sale-of-facilities Case

**T**HE Federal Power Commission disclaimed jurisdiction over an applica-

tion filed by the Arizona Public Service Company of Phoenix for authority to dis-

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pose of a part of its electric utility facilities.

The commission found that the greater portion of the facilities to be disposed of were used in intrastate distribution, and that by the proposed transaction the company would not dispose of facilities of value in excess of \$50,000. Nor was any merger or consolidation of its facilities contemplated with another "person,"

within the meaning of § 203 of the Federal Power Act.

Upon these findings, though the company owned and operated facilities for transmission and sale of electricity generated outside of Arizona and consumed in the state, the commission dismissed the application for want of jurisdiction. *Re Arizona Pub. Service Co. Docket No. E-6653, February 10, 1956.*



### High Return Not Sole Factor Considered in Allowing Transit Fare Increase

THE California commission was requested, by a transit company, to authorize additional revenues. The return which the proposed rates would produce appeared substantial on its face, amounting to 19.84 per cent. The company, however, took exception to any determination of the reasonableness of anticipated earnings by the rate-of-return approach.

The company asserted that where transit firms are concerned, the rate of return does not provide a reliable test of fair earnings because of rapid fluctuations in the rate base resulting from the short service lives of the operating properties. Operations of transit companies are subject to different and greater risks than are the operations of other public utilities. Such companies have no minimum monthly charge, as do other utilities, to protect the level of their revenues, and operations are conducted in a highly competitive field and do not enjoy the degree of monopoly found in the operation of other utilities. Reasonable earnings, the company argued, should be determined by the use of an operating ratio.

The company felt that an operating ratio of from 90 to 92 per cent, after allowance for income taxes, would be appropriate under ordinary circumstances.

The proposed fares were estimated to produce an operating ratio of 94.7 per cent. This was due to the fact that the company had elected to go ahead with its rate application in spite of the fact that another wage agreement was pending, under which salaries would be further increased.

#### *Weight Given to Operating Ratio*

The commission recognized the merit in the argument advanced by the company in support of reliance on operating ratio in the case of transit companies. In the instant case, the company's rate base, even with the value of property leased from affiliates and not owned by it included, was less than one-quarter of the original cost of the properties. It was not the commission's practice, under such circumstances, to limit the rate of return to levels deemed appropriate for other utility operations. Appropriate weight would be given to operating ratio in the determination of reasonable rates.

The commission, however, did not accept the conclusion that operating ratios should be the sole determinant of reasonable rates. It took into consideration all pertinent factors, such as rate of return, amount of net revenue, and financial requirements, as well as operating ratio.

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Viewed from this light, the commission felt that the increase was justified. If present fares were to be maintained, operating revenues would be hardly more than enough to meet the costs of the service, the excess of revenues over expenses would not provide sufficient margin to assure stability of operations against normal contingencies, and net earnings would be unreasonably low.

### *Increase Conditioned on Service Improvements*

The company's showing had been confined largely to the revenue and expense aspects of its operations. A factor to be considered along with revenue and expense data, said the commission, was the service the company was providing and proposed to provide. The company's expense estimates for the current year presumed the full operation of currently authorized schedules, but the evidence showed that the company had permitted the quality of its operations to deteriorate to a substandard level.

Obviously, said the commission, with the seeking of the benefits of increased fares on the basis of stated operations, there is a commitment on the part of the

company that with the assessing of increased fares authorized, the operations will be conducted as stated. The reliability of the service was a measure of its value to the company's patrons and in turn a measure of the fares that reasonably could be assessed. Fares that were reasonable and justified for a service of good quality might be unreasonably high for a service of lesser quality.

The company's failure to operate in reasonable conformity with its posted schedules could not be condoned. The commission was not persuaded that the company's indicated program of improvement would be sufficiently productive to yield results commensurate with the maintenance of service standards that should be provided. The company owed an obligation to its patrons to conduct its operations in such a manner as reasonably to forestall conditions leading to inferior service. The fare increase authorized was sufficient to enable applicant to provide service of good quality. The commission conditioned such increase upon the company's taking aggressive and affirmative steps to establish and maintain satisfactory service. *Re Long Beach Motor Bus Co. Decision No. 52353, Application No. 37178, December 12, 1955.*



### Usage and/or Customer Basis of Allocation More Equitable Than Incremental Cost

THE Illinois commission, in granting a water company a rate increase which would produce a return of 5.5 per cent on the fair value rate base, commented that current economic conditions and the risks involved neither established the company's proposed 6 per cent return nor supported applying the rate of return to reproduction value alone.

Both reproduction and original cost

were considered in determining the fair value rate base. Allowances were made for cash working capital, materials and supplies, and construction work in progress. Customer contributions, however, were excluded from the rate base.

Since one of the company's divisions was not included in the instant application, allocation of operating expenses was necessary. The company had proposed an

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incremental cost adjustment, derived from allocation on a customer basis. The commission did not fully subscribe to the use of incremental cost. A more equitable basis for allocation of the operating expenses, said the commission, would be to allocate on the basis of usage and/or number of customers, whichever was applicable.

### *Amortization of Regulatory Expense*

The company's operating expenses included an amount for regulatory commission expense. This item represented the annual charge for amortization of prior rate proceedings. The company proposed that the cost of this proceeding be amortized over a 5-year period.

Academically, said the commission, legitimate regulatory commission expense incurred by a utility is part of the cost of doing business and hence recoverable. For rate-making purposes the allowable annual charge for amortization of such expense should be proportionate to the overall operating expenses of the company.

The commission prescribed that the cost of the proceeding be entered on the books of the company as a deferred debit,

and appropriate credits to the account be made to reflect decreased income tax liability arising from use of the account as a deduction against taxable income. The net sum remaining in the deferred debit account was to be credited with an amount equal to an annual charge against net utility operating income until fully amortized.

### *Depreciation Based upon Original Cost*

The company's claim for depreciation based upon the reproduction cost new of a certain plant was found not supported by the record or regulatory practice. A depreciation charge computed at the composite rate of  $1\frac{1}{2}$  per cent on the original cost of depreciable plant in service was considered by the commission more reasonable.

The commission directed that the company's total income tax liability be apportioned to the four operating divisions on the basis of taxable income contributed by each division. Full allowance, before such apportionment, was to be made for taxable deductions enjoyed by each division. *Re Illinois Cities Water Co. 41665, January 4, 1956.*



## Holding Company Allowed to Convert to Investment Company

THE Securities and Exchange Commission modified its outstanding order requiring dissolution of Standard Power & Light Corporation to enable the company to be transformed into an investment company. The plan for Standard's transformation into an investment company provided for reclassification of the company's outstanding classes of stock into a single class, and elimination of its sole remaining statutory public utility subsidiary.

When the commission had ordered dissolution of the corporation, it had found that Standard performed no useful function, that it was no more than a corporate shell, and was in no position to be of any benefit to its subsidiaries. The commission had also found that in the system there existed a pyramid of companies contravening § 11(b) (2) of the Holding Company Act, which forbids the perpetuation of more than two tiers of holding companies. Furthermore, not only did the

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company's corporate structure unduly and unnecessarily complicate the structure of the holding company system, but also its voting power was unfairly and inequitably distributed among its security holders.

In considering the request to modify the dissolution order, the commission concluded that the conditions upon which the dissolution order had been predicated no longer existed. The holding company's debentures and preferred stock had been retired, thus eliminating the complexities caused by their existence in the corporate structure. And the unfair distribution of voting power had also been eliminated. The commission also found that now the company was in a tax position which would permit it to pay nontaxable return-of-cost dividends to its stockholders if it were permitted to continue as an investment company rather than to dissolve.

### *Necessity and Fairness of Plan*

The commission pointed out that it has previously held, with court approval, that a company may comply with § 11 of the Holding Company Act by becoming an investment company. But, it cautioned, such a plan must effectuate compliance as promptly as reasonably possible, and in a fair and equitable manner, or else it cannot be deemed to be "necessary." The

commission concluded that the plan did propose action which would eventuate in the company's ceasing to be a holding company as required by the act.

The plan did not provide a withdrawal privilege for any stockholders who might not desire to remain as stockholders in an investment company or for a stockholder vote on the question whether the company should transform itself into an investment company. The question was raised whether the absence of such provisions from the plan would prevent a finding that it was fair and equitable. The commission concluded that the plan was fair despite the absence of these provisions. It pointed out that in previous cases it had approved plans which provided neither for a vote nor a withdrawal privilege.

When the company announced its intention of converting to an investment company no one appeared in opposition. In considering whether the best interest of the stockholders required either a vote or withdrawal privilege, the commission observed that its experience in previous cases led to the conclusion that the votes served no useful purpose. It also concluded that the withdrawal provision is not a prerequisite to its approval of a plan which is otherwise acceptable. *Re Standard Power & Light Corp. File Nos. 54-219, 59-13, Release No. 13101, February 16, 1956.*



## Showing of Public Need Required When Carrier Requests Alternate Route Authority

ON application by a motor common carrier for authority to use an alternate route "for operating convenience only," the Utah commission applied a rule of long standing requiring, in this case, a showing of public convenience and necessity.

The carrier held authority to operate over a particular route between Salt Lake

City and Provo, serving intermediate points. This route, however, was long and mountainous, while the alternate route requested was relatively short, level, and convenient. Since the carrier had loaded trucks to be sent directly from Salt Lake City to Provo, substantial operating savings could be effected by using the alter-

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nate route for such vehicles. No authority was sought to serve any intermediate points on the alternate route.

The applicant made an ample showing of the economic advantage in using the proposed alternate route but introduced no evidence that public convenience and necessity required the new operation. A protesting carrier, on the other hand, proved that it was rendering an adequate and efficient service over the alternate route between the two cities. This carrier showed also that Provo was the most important traffic point on its line from Salt Lake City. The commission observed that under the alternate authority the bulk of the applicant's traffic would probably move from Salt Lake City to Provo, the latter becoming the key point for distribution of shipments. This, said the commission, is a substantially different operation from that permitted by the applicant's existing authority

which was designed primarily to provide adequate highway transportation for those communities along the authorized route.

The rule which controls in this case, the commission indicated, is that if the use of the alternate route would be tantamount to the institution of a new service or would afford the applicant a substantial competitive advantage not previously enjoyed, he must discharge the same burden of proof of public convenience and necessity as in other applications for new authority. Since the commission believed that the granting of the application would, in effect, authorize a new service, as well as confer a competitive advantage, and because the carrier failed to meet the burden of proving public convenience and necessity, the proposed alternate route was necessarily disapproved. *Re Peterson, d/b/a Wally's Motor Line, Case No. 3815-Sub 3, January 26, 1956.*



## Accounting Prescribed for Assets Acquired At Reproduction Cost Appraisal Figures

A PARTNERSHIP furnishing liquefied petroleum gas service was authorized by the New Mexico commission to incorporate and to transfer its assets and liabilities to the resulting corporation. In approving the transfer, the commission pointed out that the transaction constituted nothing more than a change in the form of business organization, and would involve no adverse effects upon the nature or quality of service. No change in management or rates would ensue, and the transfer would not impair the ability of the company or its owners and operators to render public service.

### *Valuation of Assets*

The valuation of the assets to be transferred to the corporation was arrived at

upon the basis of two appraisals. One of these, made late in 1955, was confined to an appraisal of the market value of real property owned by the partnership, together with depreciated replacement cost of the building improvements. The other appraisal, made in the spring of 1953, was an appraisal of the butane distribution system operated by the partnership at depreciated reproduction cost.

The commission believed that, to the extent that it might allow the assets to be transferred at a value in excess of that assigned to them upon the books of the company in accordance with the applicable system of uniform accounts, the commission would be permitting the new corporation to acquire plant and facilities and to value them for regulatory purposes upon

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the sole basis of reproduction cost depreciated. It held such valuation was not permissible, either for rate making or accounting purposes.

### *Accounting Requirements*

Accordingly, the commission directed the corporation to record the plant and facilities upon its books at the dollar amounts as shown by the books of the partnership, as of the date of transfer to the extent that the books reflect the dollar amounts in accordance with the applicable

uniform system of accounts. The difference between the aggregate of such dollar amounts and the dollar amounts attributable to the same assets under the reproduction cost appraisals should be treated as an acquisition cost adjustment.

The commission also provided that the amount of the acquisition cost adjustment, if subject to amortization, should not be considered as an operating revenue deduction of the utility. *Re City Gas & Electric, Inc. et al. Case No. 457, February 21, 1956.*



## Amortization of Television Customer Contributions Out of Earnings to Prevent Plant Depletion

**RAWLINS COMMUNITY TELEVISION COMPANY**, in a previous proceeding, had been granted a certificate of public convenience and necessity to construct and operate a system in a certain area (11 PUR3d 100). The Wyoming commission had refused to allow the use of tariff revenues for construction of the system on the theory that utility customers paid rates for service rendered and not for the purpose of financing the cost of the utility plant required to serve them.

On rehearing, Rawlins sought commission approval of a contribution plan to finance the construction of the system in lieu of constructing the same entirely from company funds.

The commission considered the proposal feasible and authorized Rawlins to collect installation fees from subscribers. A substantial portion thereof was earmarked for financing the cost of construction.

The commission further authorized the company to designate another portion as a standard service connection charge, and to treat such charge the same as operating revenues.

### *Rate Determination Held in Abeyance*

In view of the approval of the new method of financing, the commission did not deem it prudent to resolve rate issues in the instant proceeding. The reasonableness of rates could not be determined until the company had acquired some operating experience and until it had determined what investment, if any, it would have in its system when fully completed.

### *Recovery for Plant Depletion*

The commission recognized that facilities comprising the system, constructed with subscriber contributions, would ultimately be consumed in the operation of the business. Since the company's investment would not be substantial, therefore negating the recovery of full depreciation, consumption would result in the depletion of subscriber contributions without reimbursement to anyone.

A method for recovering the cost of such plant facilities consumed in the operation of the system was deemed necessary in order to maintain the integrity of subscriber investments. The company was

## PROGRESS OF REGULATION

directed to amortize contributions out of earnings in accordance with an accounting rule formulated by the commission. The amounts from such amortization were to be used only for the construction of new plant or the replacement of original plant.

### *Accounting Rule Prescribed*

In accordance with the accounting rule, the company was to charge all construction cost to an appropriate property account without reference to the source of funds. It was to compute annual depreciation in the first instance against all property and service. To offset the depreciation computed against property constructed out of subscriber contributions, the amount of such contributions credited by it during each year to its contributions account was to be amortized from the account to depreciation reserve over a period approximately equivalent to the estimated service life of the property. The total amount of the amortization in each calendar year was to be deducted from the computed amount of annual depreciation for that year and the balance charged to operating expense for depreciation. All retirements of property were to be charged to depreciation reserve.

### *Broadcasting Station Property Rights Not for Commission Determination*

During the pendency of Rawlins' application for rehearing, a broadcasting station petitioned for leave to intervene in the certificate proceeding. Both public and private injuries were alleged. The station claimed it had a definite and unlimited property right in its programs and that the commission certificate would enable the company to intercept the same.

The broadcasting station stated it had planned to seek FCC authority to install

and operate a satellite station in the community. The public would be deprived of free television service and would be forced to invest in an unlawful service which might eventually be terminated, if the certificate were granted. The commission, the station maintained, should hold the certificate application in abeyance until a declaratory judgment had been obtained from the court regarding the lawfulness of the proposed service.

### *Broadcasting Rights Legal Question For Courts*

The commission did not agree. The challenge as to the lawfulness of the company's proposed service—i.e., whether the company might legally pick up and distribute the station's telecast to its paying subscribers without invading program rights—presented an issue relating wholly to the private legal relationship existing between the parties. Therefore, the commission would have no jurisdiction to determine the station's rights in its program material even if permission to intervene were granted.

The courts were the proper tribunal to determine such rights.

The attorney general of Wyoming had held that persons furnishing community antenna television service to the public were engaged in a public utility business. The commission did not believe that it could rightfully assume that a service which the attorney general had declared to be a utility service was unlawful. Neither could it require the company to litigate a private matter prior to invoking the processes of the commission.

The public would not be deprived by the commission of immediate community television antenna service upon the basis of a private legal claim which had not been established and which the commission felt was not germane to the issues in-

## PUBLIC UTILITIES FORTNIGHTLY

volved in the application for the certificate. The station was held to have no basis for challenging, in the certificate proceeding, the lawfulness of the company's proposed utility operation.

The station's contention that the certificate grant would prevent it from establishing a proposed satellite television broadcasting station in the community, and thus deprive the public of free television service, appeared to the commission to be untenable. The station itself had alleged that the FCC would disregard the effects of competition in passing upon applications for new broadcasting stations. The commission did not have jurisdiction

over the station's operations and was under no duty to protect it against competition.

Moreover, it was difficult for the commission to see how the company's proposed service would be competitive with that proposed by the station. The public, it seemed to the commission, would be more willing to view the station's programs received off the air than it would to view the same program material received by the company's community system, particularly since the former could be viewed without cost. *Re Rawlins Community Television Co. Docket No. 9294, January 6, 13, 1956.*



### Inadequate Return Requires Rate Increase

THE Massachusetts commission commented that it had the duty to approve a power company's proposed increase in electric rates where the rate of return resulting therefrom would be lower than that previously found to be reasonable.

In the last rate case involving the company the commission had found that a return of as much as 6.19 per cent would be reasonable. In this proceeding, the company showed that a 4.98 per cent return would result from proposed electric rates. Combined with the return on its gas rates,

the total would amount to 5.33 per cent on average plant investment.

The company offered evidence to show that the composite cost of debt and equity capital would be 6.39 per cent. Any possible modifications which might be made in the company's figures, said the commission, would not bring the indicated cost of money below that which was found to be reasonable in the previous case. Since the proposed electric rate increase was not inequitable otherwise, the rate increase was approved. *Re Lynn Gas & E. Co. DPU 11549, February 6, 1956.*



### FPC Not Required to Establish for Producer Rates in Certificate Proceedings

REAFFIRMING its original opinion, the Federal Power Commission denied a rehearing of a case (11 PUR3d 413) in which it granted certificates to a number of natural gas producers and authorized a natural gas pipeline company to construct and operate facilities. The rehearing was requested by several gas com-

panies and the New York commission.

The applicants for rehearing asserted, in substance, that the Natural Gas Act imposes upon the commission a duty in certificate proceedings to prescribe as an initial rate schedule the lowest reasonable rate provided for under § 5 of the act (relating to rate-fixing proceedings). Since

## PROGRESS OF REGULATION

the commission did not establish the producers' rates in its original opinion or condition the certificates by requiring filing of satisfactory rate schedules, it was contended that the commission fell into error. But this contention was rejected on the ground that the act imposed no such obligation upon the commission.

Nor does the act require, the commission continued, that each producer-applicant must establish, as a prerequisite to the grant of a certificate to sell natural gas in interstate commerce for resale, that its rates are the lowest reasonable rates. A rate which the commission might find proper if a certificate should issue, it was

said, is not necessarily the same as the commission could determine to be the lowest rate under § 5, since "criteria for prescribing a rate necessarily differ from criteria for proscribing a rate."

Although full participation was accorded all participants in the original proceedings, no evidence was offered as to the reasonableness of the price to be charged by the producers. In these circumstances, said the commission, the public convenience and necessity did not require that the certificates be conditioned upon filing of satisfactory rates. *Re Tamborello et al. Opinion No. 287-A, Docket Nos. G-3045 et al. January 20, 1956.*



### Commission Authority to Fix City's Sewage Disposal Rate Sustained

**W**HETHER the Wisconsin commission had jurisdiction to fix a rate to be paid by a village for sewage disposal service provided by a municipality was the issue in a review proceeding before the state supreme court. The court sustained the commission's jurisdiction.

Service was provided by the municipality, though a contract under which the service was begun had expired. As the parties were unable to agree upon a rate for the future, the village applied to the commission to fix a reasonable rate, which was done. The commission did not purport to require that service be continued.

Under a governing statute the commission was authorized to fix rates upon complaint by a "user of the service." Observing that both the village and its inhabitants actually used the service, the court was of the opinion that the village came within the meaning of the statutory term. A contention by the municipality that one of the parties must be a public utility in order for the commission to take jurisdiction of the cause was rejected. Such a requirement is not in the statute, said the court, and it cannot be judicially added. *City of Kaukauna v. Wisconsin Pub. Service Commission*, 74 NW2d 335.



### Accounting for Accelerated Depreciation

**F**EDERAL tax liability is at least as great, said the Indiana commission, under the accelerated depreciation methods authorized by § 167 of the Internal Revenue Code of 1954 as it is under the straight-line method. By accelerating depreciation, a smaller amount of tax attaches during

the early years of property life, while a larger amount must be paid during later years. The end result, therefore, is not to reduce taxes permanently but merely to shift a part of the tax burden to a subsequent period.

The commission expressed this view in

## PUBLIC UTILITIES FORTNIGHTLY

approving a system, proposed by a natural gas company, of accounting for the income tax results of accelerated depreciation. The authority thus granted, however, was expressly limited to accounting purposes only.

In principle, the commission indicated, there is no difference between the accelerated depreciation authorized by § 167 of the act and the accelerated amortization of emergency facilities permitted under § 168.

The end results sought to be achieved are similar in each case.

### *Accounting Entries*

During the early years of property life when a deferral of federal income tax will

result from accelerated depreciation, charges should be made to "Provisions for Deferred Federal Income Taxes" in the amount of the tax deferrals. Corresponding credits should be entered to "Appropriated Surplus Arising from Deferment of Federal Income Taxes."

During the later years when depreciation deductions will be less than under regular depreciation methods, charges representing the resulting tax increase should be made to the appropriated surplus account until it becomes depleted. An account entitled "Portion of Current Federal Income Taxes Deferred in Prior Years" should be correspondingly credited. *Re Natural Gas Service, Inc. Cause No. 26550, February 10, 1956.*

## *Other Recent Rulings*

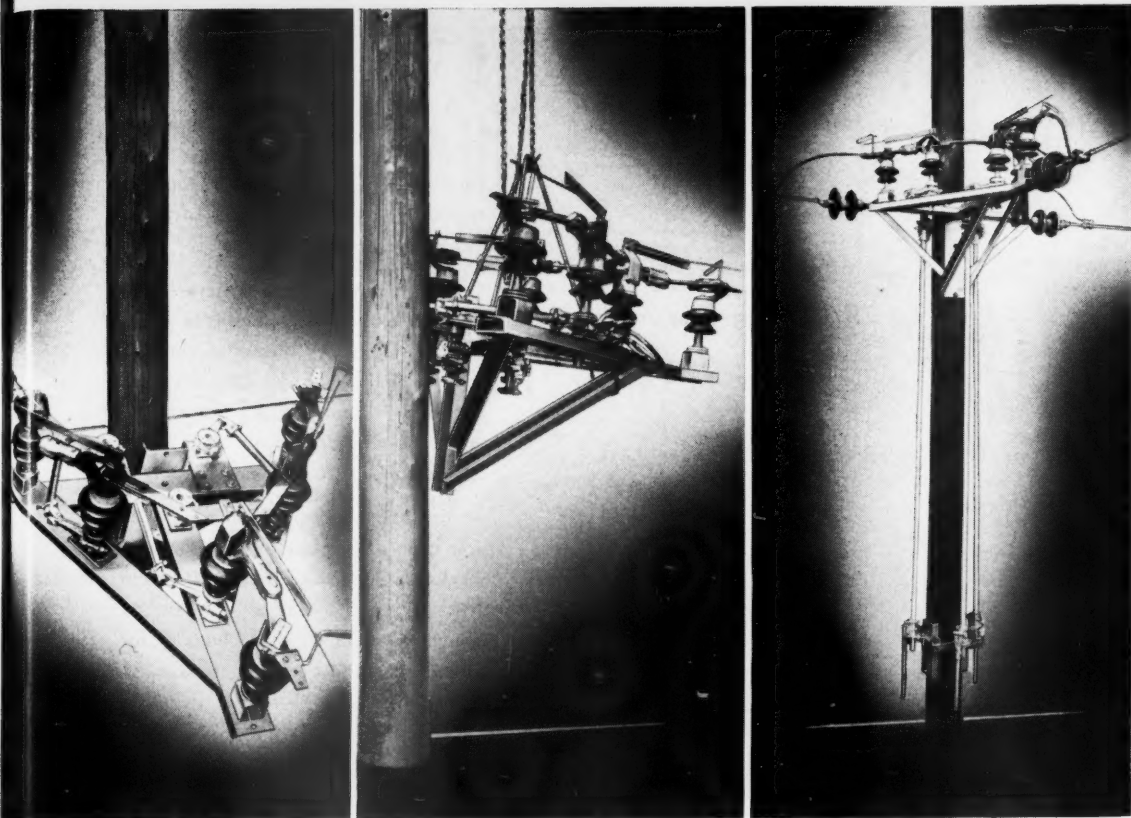
*Station Discontinuance Refused.* A railroad's request to discontinue open agency service at a certain station was refused by the Missouri commission where the station had been operating at a profit and the applicant's contention that adequate and efficient service could be rendered from adjoining stations was not sustained by the evidence presented. *Re Thompson, Trustee, Case No. 13,188, November 4, 1955.*

*Station Agency Closed.* The Missouri commission authorized the closing of a railroad station agency located in a town of only 375 persons, since the public made little use of the agency and it was being operated at a heavy loss to the railroad company. *Re Wabash R. Co. Case No. 13,260, January 3, 1956.*

*Control Not Factor in Certificate Grant.* The United States district court held that

the question of whether a bus company could lawfully transfer control and management to another was a matter which could be determined only in a separate control proceeding before the ICC, not in a proceeding upon a company's application for a certificate for a new route. *Southern Kansas Greyhound Lines, Inc. v. United States, 134 F Supp 502.*

*Attack on Carrier Rates Dismissed.* The California commission dismissed a complaint by a motion picture theater operator that a motor common carrier's charges for transportation of film were unreasonable and prejudicial, since no satisfactory supporting evidence was presented and since the establishment of lower charges as to this customer would violate the long- and short-haul requirements of the state law. *Myrtle Theatres, Inc. v. Santa Barbara Special Delivery, Decision No. 52232, Case No. 5588, November 14, 1955.*



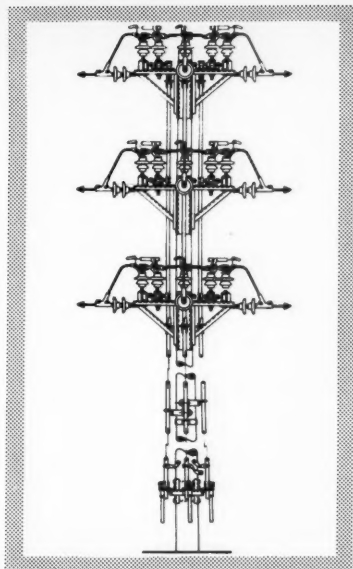
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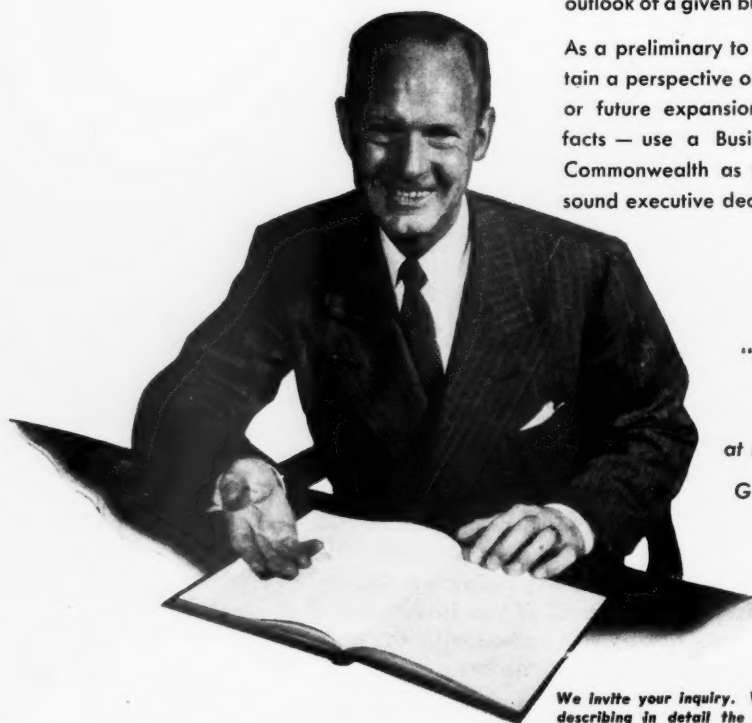


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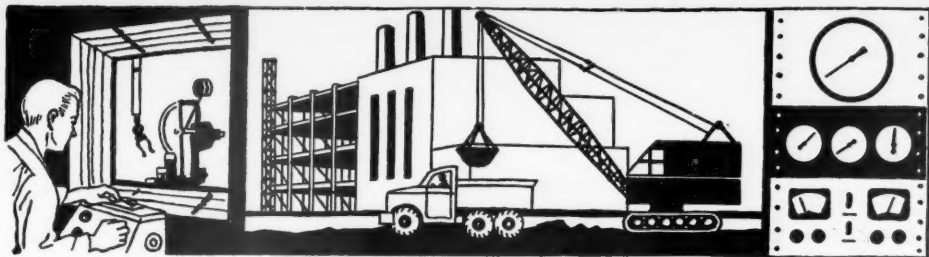
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## Industrial Progress

### Atlanta Gas Light Marks "One Hundred Years of Service"

THE Atlanta Gas Light Company has been welcomed into the "centennial club" of Georgia with the presentation of a citation from the state chamber of Commerce for 100 years of operation.

The citation was presented to Rock Taber, president of Atlanta Gas Light, by J. J. McDonough, president of the state chamber. Since the chamber began the award of such citations several years ago, only 40 Georgia businesses which qualify have been listed.

"The tradition of public service and know-how to assure it is the heritage of our company has received from the men and women who went before us. Our aim is to maintain and enlarge that tradition," stated Mr. Taber.

The Atlanta Gas Light Company was incorporated on February 16, 1866 by act of the Georgia Legislature and is today the oldest continuously operated corporation in Atlanta and the second oldest in Georgia. The original charter, under which Atlanta Gas Light Company still operates, is one of the few still existing corporate charters granted by the Georgia Legislature.

Earlier, on Christmas Day, 1855, gas service in Atlanta had already been started. On that date 50 gas street lamps were lighted, bringing a new era of illumination. The question of lighting Atlanta's streets had for some time perplexed the city fathers and no definite action was taken until 1855, when William Helme came from Philadelphia to Atlanta and proposed the erection of a gas plant. After several meetings with the city council an ordinance was passed empowering the mayor to close a contract with Helme to erect a coal gas works, and lay down pipes for lighting the streets and the public and private buildings.

The growth of the young company was rapid and its affairs prospered even during the first years of the War Between the States. On the ninth of August, 1864, Sherman's army began to bombard Atlanta. On that day practically every building in Atlanta was damaged in various degrees, including the gas works. A shell exploded against a gas lamp post at the corner of Alabama and Whitehall streets. This damaged lamp post . . . the only one of the original 50 that remains in its same location . . . has been preserved as one of the mementos of the Battle of Atlanta.

Atlanta's gas supply survived the three battles and forty-day siege of the summer of 1864, but its plant was destroyed, along with 3,400 other buildings, when the town was burned by General Sherman in November of that year. Gas service was restored on September 15, 1866, and again the growth of the company was steady.

In 1881 Atlanta Gas Light Company introduced the use of gas for cooking and a special range was introduced and a cooking rate of \$2 per 1,000 cubic feet was made effective at that time.

Prior to 1884 Atlanta Gas Light Company was the only gas company in Atlanta. In that year, however, the United Gas Improvement Company established in Atlanta a strongly financed company for the distribution and sale of "water gas" in contradistinction to the coal gas distributed by Atlanta Gas Light Company. After a two-year rate war, there was a consolidation in 1886, involving the absorption of the new company by the old company under the original charter of the Atlanta Gas Light Company, with the control of the company passing to the U.G.I. Company.

About this time the City of Atlanta experienced a rapid growth and a period of prosperity which taxed the financial ability of the city to keep pace

with improvements. The stock of the Gas Company held by the city was sold piece-meal to finance various civic projects.

The U.G.I. retained control of the company until 1902, when the Georgia Railway, Electric and Gas Company was formed and acquired ownership of the Gas Company by an exchange of its stock, for Gas Company stock owned by U.G.I.

In 1912 the new Georgia Railway and Power Company took over the stock assets of the older company and leased its property including the Atlanta Gas Light Company plant.

In February 1927 the present Georgia Power Company was formed, acquiring all the stock of the Gas Company and continuing to operate it until it was sold to Central Public Service Corporation in 1929.

With the bringing in of natural gas in 1930 gas for home heating came into general use in the city. The commercial establishments and industries in and around Atlanta also made wide use of natural gas.

In August 1932 the control of the company passed to Consolidated Electric and Gas Company under a plan for reorganization of Central Public Service Corporation and its subsidiaries.

In 1937, Atlanta Gas Light Company purchased the natural gas distribution systems of Georgia Natural Gas Corporation, an affiliate, serving many surrounding towns. In 1941, it acquired, by merger, the properties of the Macon Gas Company and Georgia Public Utilities Company, both affiliates. Since then natural gas service has been extended to many other communities. As it has done since its beginning, Atlanta Gas Light Company is serving Atlanta's metropolitan area. Facilities for gas service are being continuously expanded in this area

(Continued on page 26)

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## INDUSTRIAL PROGRESS—(Continued)

where the population now exceeds eight hundred thousand.

In November, 1947, under the Public Utility Holding Company Act of 1935, arrangements were completed for the distribution of all of the common stock of Atlanta Gas Light Company to the public holders of Consolidated Electric and Gas Company preferred stock. The company's affiliation with any holding company then ceased and it once again became an independent operating utility company.

### New Matthews Bulletin on Marking Dies

JAS. H. MATTHEWS & CO. has issued a handbook . . . "Supplement B-146 . . . Press Style Marking Dies by Matthews," which is stated to be the most complete, informative manual ever compiled regarding marking with steel dies.

The manual contains a section dealing with basic information on the use and selection of steel dies for every application; a section on steel stamping, embossing and foil leaf marking dies; a section on press-style type holders, tool post holders for marking around the peripheries of cylindrical or round-tapered parts; and numbering heads for embossing or debossing.

Copies of the manual may be obtained, without charge, from Jas. H. Matthews & Co., 3942 Forbes street, Pittsburgh 3, Pennsylvania.

### New Type Vehicle Is Combination Automobile-Truck

AN entirely new vehicle which is said to have the load capacity of a limousine or panel truck, the comforts of a passenger car and greater versatility than a station wagon, has been introduced by Dodge Division. Public utility use is among the hundreds of vocations for which the vehicle was engineered.

According to the announcement, the Dodge Town Wagon truck has passenger car styling but possesses greater road clearance than passenger cars and so may be used on rutted and muddy roads and in many off-the-highway operations where cars cannot travel. It is offered in 8-passenger and 6-passenger models.

Center and rear seats are easily removed to carry cargo. The vehicle has a maximum payload capacity of 1650 pounds and permits 90 cubic feet of load space even when carrying six passengers. Rear cargo space 65 inches wide and 53 inches high provides room for hauling many things.

Built on a Dodge half-ton truck chassis the vehicle is offered with the

choice of a 169-horsepower Power Dome V-8 engine or a 110-horsepower 6-cylinder engine. PowerFlite automatic transmission is available on all models. The cost of the Town Wagon is said to be considerably less than most regular station wagons.

### New Dual Scale on Flow Indicator Permits Use with Water or Air

A BALL-TYPE Flow Indicator recently announced by Schutte & Koerting Company, Cornwells Heights, Bucks County, Pa., provides a dual scale for the approximate measurement of water flow in gpm and flow in cfm. Thus, this inexpensive but sturdily built instrument for indicating water or air flow and approximate rate of flow is made exceptionally versatile for industrial use.

The ball-type flow indicator uses a ball on a guide rod, installed in a tapered glass tube to indicate flow in a pipe line. When fluid, water or air, flows from the inlet at the bottom to the outlet at the top, it exerts force on the free moving ball causing it to rise in the tapered tube, higher as the rate of flow of the fluid increases. The position of the ball in relation to the scale graduations gives an approximate indication of the fluid rate of flow.

This type flow indicator is recommended for use when flow is from one direction only—bottom to top in vertical pipe lines and when observation from any direction is desired. Made of bronze, the indicator is carried in stock in  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1, 1 $\frac{1}{2}$ , and 2 inch pipe connection sizes.

Information on all types of Flow Indicators can be obtained by writing for Bulletin 18W to Schutte and Koerting Company, Dept. M, Cornwells Heights, Bucks Co., Pa. **\$52,000,000 Program Planned By Northern Indiana Public Service** NORTHERN Indiana Public Service Company will spend \$52,000,000 for expansion and modernization facilities in 1956 and '57, Dean Mitchell, NIPSCO president, revealed recently in the company's annual report.

The largest item in the company's expansion and modernization program (Continued on page 28)

### Editorial Position

Well-known publishing company has position of Associate Editor open in Rochester, New York. Office for a lawyer interested in opportunity for a rewarding career in field of law editing. For further information and details, Write to Box 329, Public Utilities Fortnightly, 309 Minnesota Building, Washington 4, D. C.

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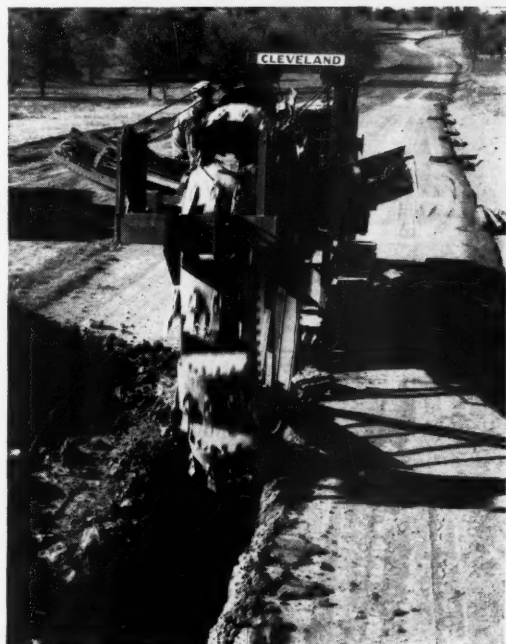
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is the completion of the new Dean H. Mitchell generating station on the lake front in Gary. The first unit of this ultimate six-unit plant will go "on the line" early this fall, adding 130,000 kilowatts to the company's generating capacity.

Other projects include a 138,000 volt substation on the south side of Waterloo; new operating headquarters at Goshen and Logansport; a new commercial office building in Crown Point; a storage garage at Fort Wayne; and a storage building at the company's Aetna substation in Gary.

Additional transformer capacity will be provided at major electric substations in the company's Hammond, Plymouth, and Monticello districts.

A new, five-floor general office building annex in downtown Hammond with a floor area of more than 40,000 square feet is under way and a five station microwave system at Michigan City, Gary, E. Chicago, and Hammond, will be completed this year.

### Gets Patent On Air Mapping Device

W. S. KARR, executive vice president of Abrams Aerial Survey Corporation has received notice that his application for a patent filed in 1952 has been approved. The patent covers equipment and a method for assembling a large aerial photo mosaic map in small units and maintaining precision match of the units and geographical control over the entire area.

The invention is said to solve the problem of making an aerial map of a large area on a flat surface when the pictures actually are of the earth's curved surface. The meridians of polyconic maps usually converge slightly, creating a problem to cartographers in making an accurate map.

With the Karr invention the quadrangle configurations are cut from hard board to exact size and shape and then known control points indicated on their surfaces. The pictures are then mounted on the boards with care to keep the control points on each picture over the control points on the boards.

The quadrangles are grouped in a frame so control can be carried from one to another. As such units are usually photographed, for reproduction of the maps in quantity, the new invention includes the design of a frame which fits over a completed quadrangle for the photography. The frame carries all information common to maps.

The equipment and method was developed during work on a large precision government mapping project in Florida which was under Karr's supervision at Abrams Aerial Survey Corporation several years ago.

### G-E and PG&E to Build and Operate Atomic Power Plant

THE nation's first privately financed atomic electric power will be generated in 1957 near San Francisco, Calif.

This historical development in the peaceful use of atomic energy was announced recently by the General Electric Company. G-E disclosed that, with the Pacific Gas and Electric Company, it will operate an atomic-electric plant in the Livermore-Pleasanton area, 40 miles southeast of San Francisco.

Steam for generation of power will be supplied by an experimental reactor facility, part of an atomic laboratory which G-E will build for development in the peacetime field of atomic energy.

In the experimental plant, steam from the nuclear reactor will feed into a turbine-generator, provided and operated by PG&E, which, in turn, will send as much as 5,000 kilowatts of electric power into the PG&E transmission network. Integration of the nuclear phases of the plant will be the responsibility of the General Electric Company.

Summarizing the importance of the announcement, PG&E president Norman R. Sutherland, and Francis K. McCune, vice president in charge of G-E's Atomic Products Division, said their project will make history on these two fronts:

1) The scheduled operating date is the earliest yet announced for a privately financed atomic power plant.

2) Power from a boiling water reactor designed for dual-cycle operation will be generated for the first time. This reactor is a pilot plant for the 180,000-kilowatt station to be built near Chicago by G-E for the Commonwealth Edison Company, which is associated in this project with the Nuclear Power Group, Inc. As part of the development of the dual-cycle boiling reactor concept, it marks a major advance toward economically competitive electricity from nuclear fuel.

The initial design of the reactor has been carried on by a group of G-E engineers and scientists at San Jose, Calif., since last August.

The Dresden station design, construction and installation also are being financed entirely by private enterprise. Associated with Commonwealth Edison and PG&E in the Nuclear Power Group, Inc., are the following companies:

American Gas and Electric Service Corp., Bechtel Corp., Central Illinois Light Company, Illinois Power Company, Kansas City Power and Light Company and the Union Electric Company of Missouri.

In January, General Electric announced plans to establish its first generating department headquarters at the Far West. Its Atomic Power Equipment Department (APED) will be located in San Jose.

### Kentucky Utilities Has \$20,839,000 Program

KENTUCKY Utilities Company recently announced a construction budget of \$20,839,000 for extending and improving its electric system during 1956. The system serves 215,000 customers in 75 Kentucky counties and two adjoining counties in Tennessee.

The 1956 budget is the largest in the company's history and exceeds the 1955 figure by more than \$2,000,000. R. M. Watt, K. U. president, said.

The largest single expenditure planned is approximately \$9,000,000 on the first unit of the 500,000-kilowatt E. W. Brown steam electric generating station under construction at Dix Dam. This will bring the total to be spent on the plant to \$15,682,000 by the end of 1956.

A total of almost \$5,000,000 is budgeted for transmission improvements and nearly \$6,000,000 for new and expanded distribution facilities. In addition, almost \$1,000,000 is marked for other classification improvements of a general nature.

### "Invitation to Learning"

THE opportunities offered by the Remington Rand Institute to business executives who wish to enhance their knowledge of business systems and equipment, are outlined in a brochure entitled "Invitation to Learning."

The eight-page, illustrated brochure touches briefly on the objectives of the different seminars. There are seminars for executives and department heads who are specifically interested

(Continued on page 30)

# Why buy a truck in the dark?

*"Oh, kick me!" cries Merchant Neal,  
In a posture hardly genteel.  
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That he'd missed the Dodge Dealer's Deal!*



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in punched-card or electronic methods; seminars of top-level people from many firms who discuss general management problems; seminars for members of one firm who attack a specific problem.

The booklet also outlines the general procedures followed and the subject matter covered. Lectures by staff members and guest specialists are supplemented by panel discussions between executives with similar interests.

Copies of this brochure (X-1630) are available at Remington Rand sales offices in all principal cities, or by writing to the Remington Rand Institute, 315 Fourth avenue, New York 10, N. Y.

### Florida Utilities Plan Atomic Power Project

A MAJOR atomic power plant project is being undertaken jointly by Florida's three largest electric utility companies, which are laying plans for "the design, construction and operation of a large-scale nuclear power plant," according to a joint announcement.

The three companies, Florida Power & Light Company, of Miami; Tampa Electric Company, of Tampa; and Florida Power Corporation, of St. Petersburg, have entered into an agreement with Allis-Chalmers Manufacturing Company and The Babcock & Wilcox Company looking to a target date of 1962-63 for the construction and operation of a "major power plant using atomic energy for fuel, to be located at an appropriate site within suitable transmission distance of all three Florida companies," it was revealed.

W. J. Clapp, president of Florida Power Corporation at St. Petersburg, cited the high cost of fuel oil, which must be imported into Florida from Gulf and Caribbean ports. "We feel that now is the time to make a thorough study of the possibility of using atomic energy."

"All three companies have been keeping a close watch on atomic power plant development," said Robert H. Fite, president and general manager of Florida Power & Light Company. "We feel this agreement is timely and are hopeful that it will hasten the time when it will be economically feasible to build a major nuclear power plant of perhaps as much as 200,000 kilowatts capacity."

At Tampa, Florida's biggest Gulf Coast industrial center, W. C. Mac-

Innes, president of Tampa Electric, said that "Florida's remarkable industrial growth makes it imperative that we seek an abundant supply of fuel that is not subject to the price fluctuation or the transportation difficulties attendant to the importation of fuel oil."

The three companies look to Babcock & Wilcox and Allis-Chalmers, who are also parties to the agreement, for technical know-how, design and manufacture of the major equipment. It is also contemplated that Stone & Webster Engineering Corp. will be associated with the plant's final layout and construction.

### Ebasco Appointment

EBASCO Services Incorporated has announced that L. J. Aubrecht has joined the company as a business consultant. For the past two years Mr. Aubrecht has been a sales executive with Dunlop Tire and Rubber Corporation of Buffalo, New York.

His wide experience in management and marketing has covered sales, marketing, product development, credit and management in many fields, including public utilities.

### Philadelphia Electric Co. Wins Community Service Award

PHILADELPHIA Electric Company has been given the *Look* magazine Community Service Award for 1956 in recognition of its home-wiring modernization program, known as the 100-A activity, which was cited as an "outstanding community service."

Although presented to the utility, the award recognizes the contributions of many groups participating in this activity, including not only Philadelphia Electric employees but local electrical contractors, distributors, dealers, manufacturers, and financial institutions.

The program stressed the necessity for and benefits of adequate wiring to assure the comforts of modern electrical living, as well as safety in the home. The program will be continued.

Philadelphia Electric was given the award, not only because of the effectiveness of the plan, but also because of the widespread cooperative effort it inspired throughout the hundreds of communities in Delaware Valley. A spokesman for the Electrical Association of Philadelphia declared the campaign had been responsible for many thousands of home-wiring modernization projects, but that the greatest good was a growing public awareness

of the need for improving electrical service facilities in the home.

### Holan Catalog

A NEW technical catalog on the Series 2200 Ladder has been released by J. H. Holan Corporation, 4100 W. 150th street, Cleveland 11, Ohio.

The 4-page, 2-color catalog uses illustrations to show various safety and operating features: the new band-type bracket ladder hooks, duo-level platform, counter spring counterbalancing and others. The back page has a chart showing ground-to-platform heights for elevations from 12° to 72°.

### New Booklet—"10 Ways To Cut Costs With Inside Telephones"

"10 Ways To Cut Costs With Inside Telephones," a new 12-page illustrated booklet, has been prepared by Automatic Electric, manufacturers of P-A-X Business Telephone System.

The booklet tells how ten different organizations, each in a different line of business, are saving money with P-A-X, the privately-owned, rent-free dial telephone system used exclusively for "inside" calls.

Quoting executives of these firms, the pamphlet explains the merits of this telephone system, separate from the public telephone service, stepping up production, saving man hours, cutting costs, improving customer relations, and effecting further company benefits.

Free copies may be obtained from J. A. Webber, Automatic Electric Sales Corporation, 1033 West Madison street, Chicago 7, Illinois.

### United States Rubber Announces Personnel Changes

Two new appointments in the electrical wire and cable department of United States Rubber Co. have been announced by Howard H. Weber, department sales manager.

Edward T. Corbus, Jr., former manager of electric utility sales, has been named assistant sales manager of the department. Mr. Corbus started with the wire and cable department in 1933. He has held positions as divisional and district sales manager.

Henry J. Cluver, who began as a sales engineer in 1936, has been appointed manager of the Middle Atlantic division. He will make his headquarters in the Philadelphia branch.

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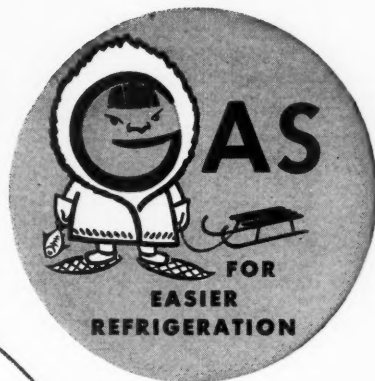
In fact, it explains the time-saving and effective ways of making the step-by-step progress toward the rate decision, including information concerning the requirements for appeal and review.

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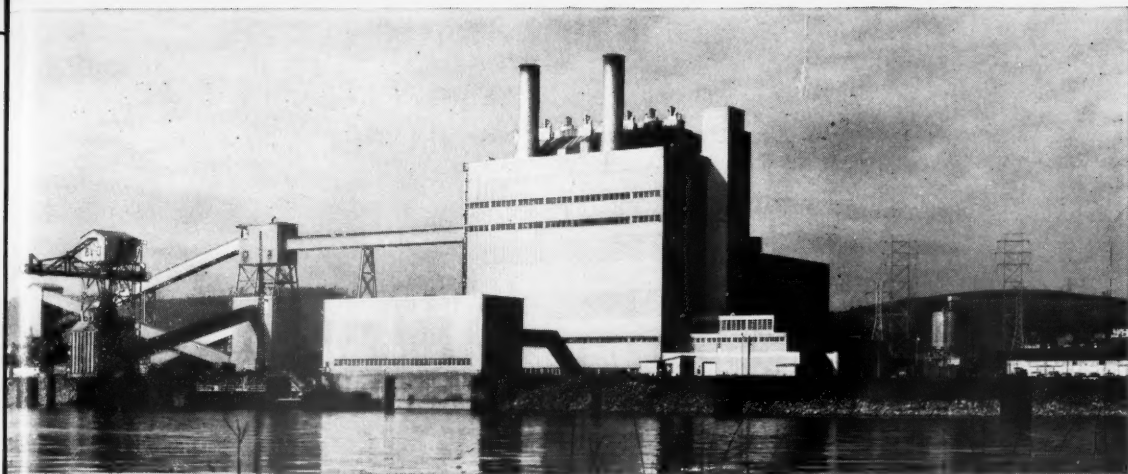
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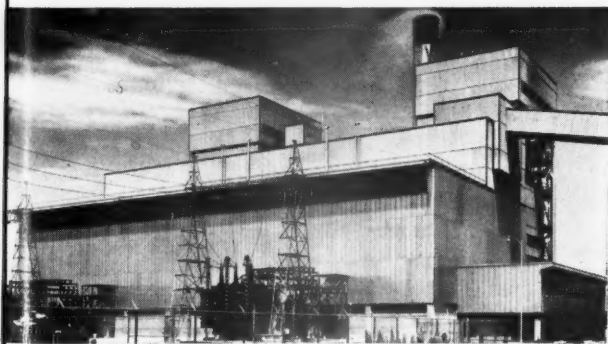
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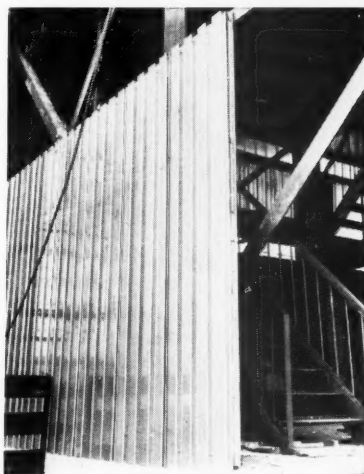
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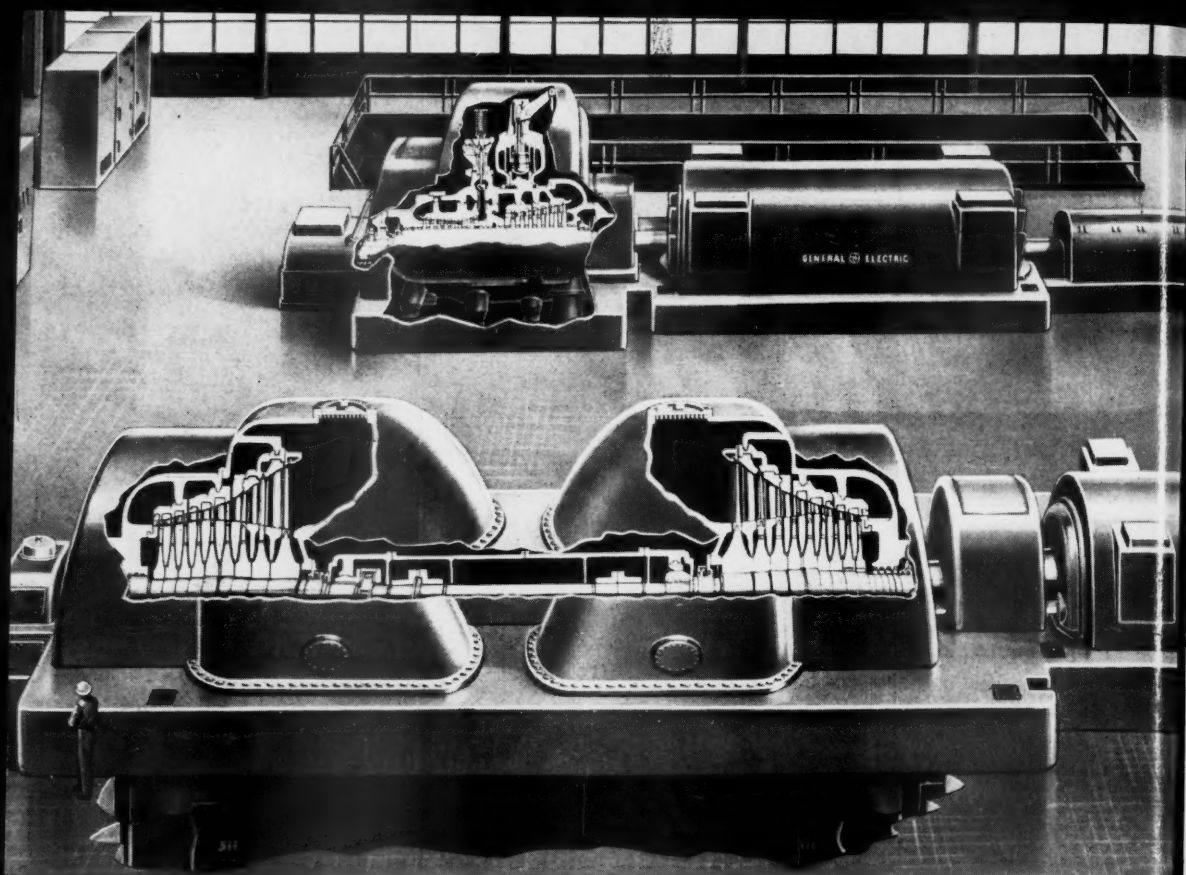
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thermal distortion by concentrating high steam temperatures in a small area of the casing. This feature and use of special high-pressure, high-temperature parts result in outstanding efficiency. Fuel savings on a typical 250,000-kw, cross-compound unit can be as much as 50,000,000 pounds of coal per year.

Because there are two sections, each is comparatively short—a feature helpful in making more compact station arrangements. Some cross-compound units can be fitted into extensions of existing stations that cannot accommodate other designs of equal rating.

**The best G-E turbine** today burns 29 percent less fuel per kilowatt hour than the most efficient unit of 20 years ago. Opportunity for further improvement offers a challenge that is being met by the ingenuity and creativity of G-E people in research, engineering, and manufacturing. Large Steam Turbine-Generator Department, General Electric Co., Schenectady 5, N. Y.

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